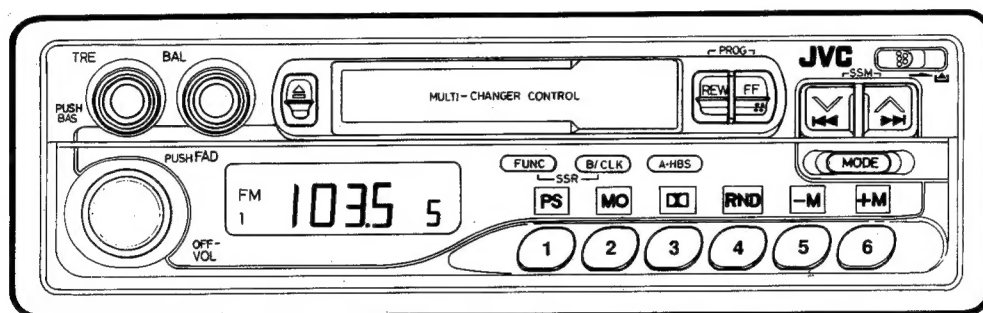


# JVC

## SERVICE MANUAL

### MULTI-CHANGER CONTROL RECEIVER

## KS-RT70 B/E/G/GE/GI



#### Area Suffix

B.....	U.K.
E.....	Continental Europe
G.....	Germany
GI.....	Italy
GE.....	Eastern Europe, Austria and Switzerland


## Contents

■ Features .....	Page2	6.Standard Schematic Diagram.....	23
■ Specifications .....	2	7.Location of P.C.Board parts	
■ Instructions(Extract) .....	3	and Parts List .....	30
1.Location of Main Parts .....	14	8.Exploded View of Enclosure Component	
2.Removal of Main Parts .....	15	Parts and Parts List .....	40
3.Main Adjustment .....	18	9.Exploded View of Mechanism	
4.Wiring Connections .....	21	Component Parts and Parts List .....	42
5.Block Diagram .....	22	10.Packing Illustration and Parts List...	Back Cover

## ■ Features

- Detachable Control Panel
- Controller for control of CD changers containing up to 108 compact discs (for example, when 6 JVC XL-MG1800 CD Changers are connected, each XL-MG1800 contains 3 magazines so that this controller can access the discs in 18 magazines; with each magazine containing 6 discs, consequently it gives access to up to 108 discs)
- High Sensitivity Tuner
- AM/FM-Stereo PLL Synthesizer Tuner
- 24-Station Preset Tuning (FM-18, AM (MW/LW)-6)
- Preset scan/Seek/Manual Tuning
- Strong-station Sequential Memory (SSM)
- SK/DK Traffic Information Reception (KS-RT70 G/GE)
- Special-preset Station Reserve (SSR)
- U-Turn Auto-Reverse Mechanism

- Ignition Key-off Release/Key-on Play Mechanism
- Dolby<sup>®</sup> B Noise Reduction
- 4-Channel Amplifier System  
Maximum Power Output of 8 W per channel (Front)/25 W per channel (Rear)
- Active Hyper Bass Sound
- Active-illuminated Operating System (AOS)
- Clock
- Line Output Terminal

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

## ■ Specifications

### AUDIO AMPLIFIER SECTION

Maximum Power Output:

(Front) 8 W per channel

(Rear) 25 W per channel

Continuous Power Output (RMS):

(Front) 3 W per channel into 4  $\Omega$ , 100 to 20,000 Hz at no more than 0.8% THD

(Rear) 12 W per channel into 4  $\Omega$ , 40 to 20,000 Hz at no more than 0.8% THD

Load impedance: 4  $\Omega$  (4–8  $\Omega$  Allowable)

Tone control Range

Bass:  $\pm 10$  dB at 100 Hz

Treble:  $\pm 10$  dB at 10 kHz

Frequency Response: 40 – 20,000 Hz

Signal-to-Noise Ratio: 70 dB

Line-Output Level/Impedance:

0.5 V/20 k $\Omega$  load (250 nWb/m)

### RADIO SECTION

Frequency Range

FM: 87.5 – 108.0 MHz

AM: (MW) 522 – 1,620 kHz

(LW) 144 – 281 kHz (Manual)

144 – 279 kHz (Auto)

[FM Tuner]

Usable Sensitivity: 12.1 dBf (1.1  $\mu$ V/75 $\Omega$ )

50 dB Quieting Sensitivity: 16.3 dBf (1.8  $\mu$ V/75 $\Omega$ )

Alternate Channel Selectivity (400 kHz): 65 dB

Frequency Response: 40 – 15,000 Hz

Stereo Separation: 35 dB

Capture Ratio: 1.5 dB

[MW Tuner]

Sensitivity: 20  $\mu$ V

Selectivity: 35 dB

[LW Tuner]

Sensitivity: 50  $\mu$ V

### CASSETTE DECK SECTION

Wow & Flutter: 0.11 % (WRMS)

Fast Wind Time: 100 sec. (C-60)

Frequency Response (NR-OFF): 50 – 16,000 Hz ( $\pm 3$  dB)

Signal-to-Noise Ratio (Normal tape)

(Dolby NR on): 60 dB

(Dolby NR off): 52 dB

Stereo Separation: 40 dB

### GENERAL

Power Requirement

Operating Voltage: DC 14.4 V (11 V - 16 V Allowable)

Grounding System: Negative Ground

Dimensions (W x H x D)

Installation Size: 182 x 52 x 152 mm

(7-13/16" x 2-1/16" x 6")

Panel Size: 189 x 58 x 15 mm

(7-1/2" x 2-5/16" x 5/8")

Gross Weight: 2.1 kg (4.7 lbs)

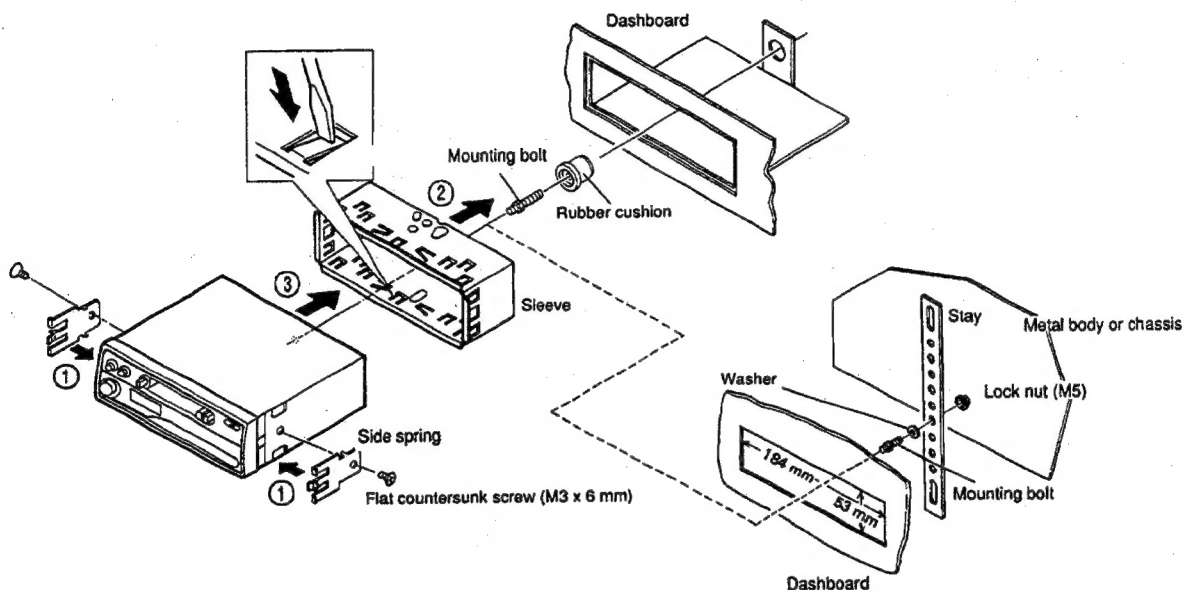
*Design and specifications subject to change without notice.*

## ■ Installation(IN-DASH Mounting)


- Before using this unit for the first time, press the eject button fully.
- The following illustration shows a typical installation, however, always adjust to correspond to the car in which the unit is to be installed. If you have any questions and for installation kits, consult a JVC "IN-CAR ENTERTAINMENT" dealer.

- ① Attach the side springs.
- ② Install the sleeve in the dashboard.
  - After the sleeve is installed in the dashboard, select and bend the appropriate tabs to hold the sleeve firmly in place.
  - Next, mount the mounting bolt onto the rear of the unit's body and slide the rubber cushion onto this bolt.
- ③ Slide the body of this unit into the sleeve so that they are locked together.

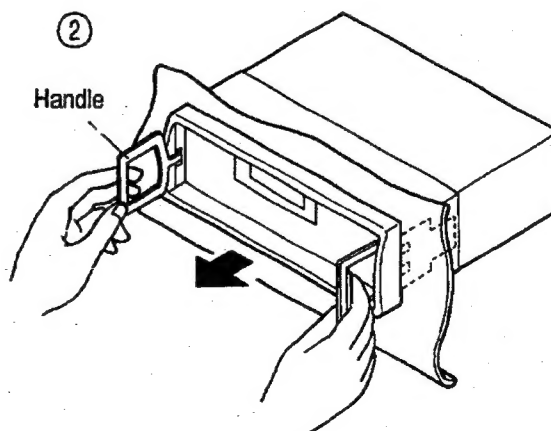
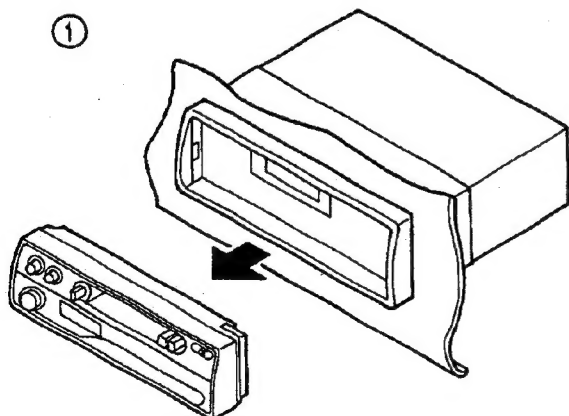
- Follow the numbers for mounting.



### Removing the body of unit

- Before removing the body of this unit, remove the nut, connector, etc. retaining the rear section.
- ① Remove the Control Panel by sliding the release switch (  ) to the right.

- ② As illustrated, insert the handles between the side springs and sleeve. Then, slide the unit out while pressing the handles toward each other.



## ■ Electrical Connections

To prevent short circuits, while making connections, keep the battery's negative terminal disconnected.

We recommend that you make all electrical connections before installing the unit. If you're not sure how to correctly install this unit, have it installed by a qualified service technician.

### Note:

This unit is designed for 12 volts DC, Negative Ground. If your vehicle does not have 12 volts negative ground electrical system you need a voltage inverter which can be bought from a JVC "IN-CAR ENTERTAINMENT" dealer.

- Maximum input of speakers should be more than 25 W at rear and 8 W at front with an impedance of 4 to 8  $\Omega$ .

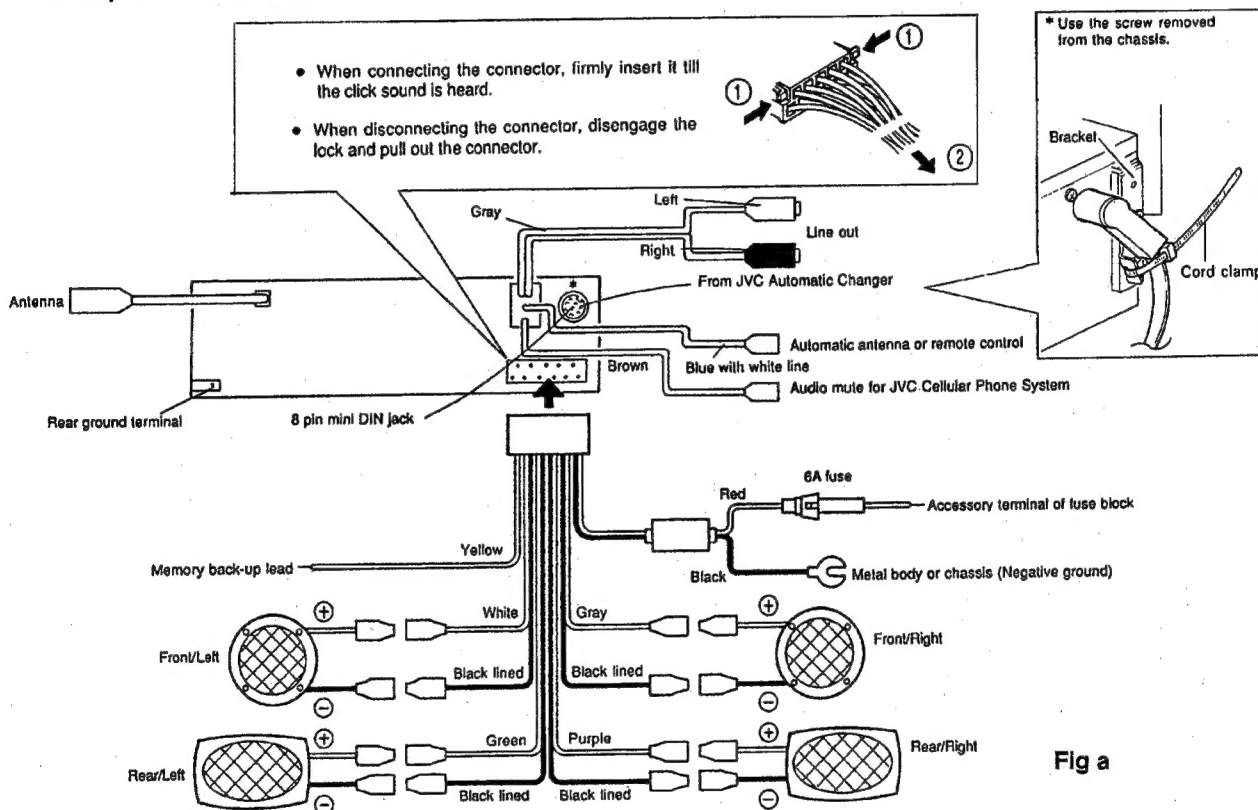
### Cautions:

This unit uses BTL (Balanced Transformerless) amplifier circuitry, i.e., floating ground system, so please comply with the following:

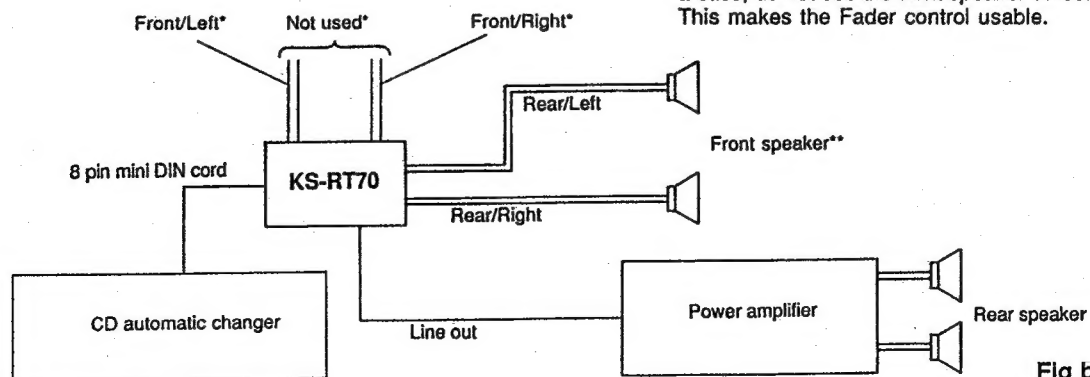
- Be sure you do not connect the black lined speaker leads to a common point.
- Don't connect speaker leads to the metal body or chassis.
- When not using the automatic antenna or audio mute lead, cover the terminal with insulating tape to prevent the lead from shorting.

- Be sure to ground this unit to the car's chassis.

### A. 4-speaker connections



### B. 4-speaker connection by adding a power amplifier



- When making the 4-speaker connections using a power amplifier, connect the front speakers to the rear speaker cords. (In such a case, do not use the front speaker cords.) This makes the Fader control usable.

### C. Line terminal connections (Line out)

Since this unit has line-out terminals, an amplifier and other equipment can be used to upgrade your car stereo system.

- When connecting an amplifier, connect this unit's line-out terminals with the amplifier's line-in terminals.

### D. Power aerial (Automatic antenna) connections

This set is equipped for the automatic extension and retraction of a power aerial when the power switch is turned on and off. The connection from the audio unit (REMOTE blue with white line lead) is via a separate relay to the fully automatic aerial motor unit incorporating a built-in terminal circuit.

### E. Memory back-up lead

Connect this lead to a position where live power is supplied even when the ignition key is taken out.

### F. Fader control

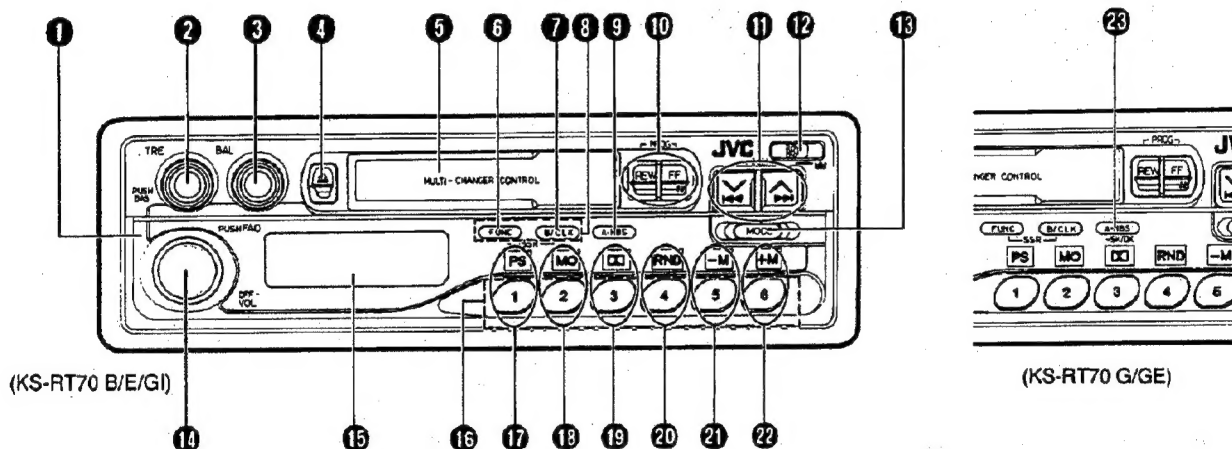
- When used in a 4-speaker system (Fig. a)

Use this control to balance the volume levels of the front and rear speakers. Turn counterclockwise to decrease the volume levels of the rear speakers and clockwise to decrease those of the front speakers. The overall volume level can be adjusted with the volume knob.

- 4-speaker connection system by adding a power amplifier (Fig. b)

Turn clockwise to decrease the volume level of the rear speakers which are connected to the power amplifier and counterclockwise to decrease that of the front speakers which are connected directly to the receiver.

- When used in a 2-speaker system  
Set this control to the center position.

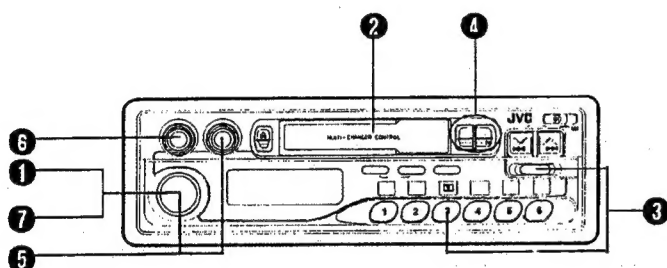
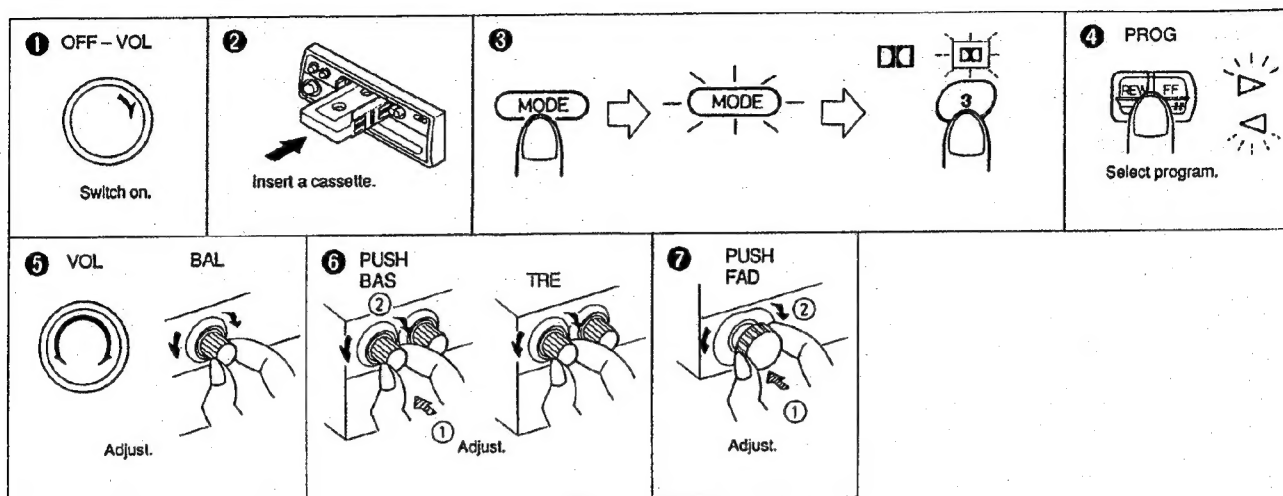


- 1 Control panel
- 2 Treble (TRE)/Push Bass (PUSH BAS) control
- 3 Balance (BAL) control
- 4 Eject (▲) button
- 5 Cassette loading slot
- 6 Function (FUNC) button
- 7 Band (B)/Clock (CLK) button
- 8 Special-preset Station Reserve (SSR) buttons
- 9 Active Hyper Bass Sound (A.HBS) button (KS-RT70 B/E/GI)
- 10 Program (PROG)/REW, FF buttons
- 11 Tuning/SSM/Time adjustment/Skip (Search) buttons  
Down frequency/Hour adjustment (▼)/(◀◀)  
Up frequency/Minute adjustment (▲)/(▶▶)
- 12 Control panel release (⏏) switch


- 13 MODE button
- 14 Power on-OFF/volume (VOL)/Push fader (PUSH FAD) control
- 15 Display window
- 16 Preset station buttons (No. 1 - No. 6)  
Disc number buttons (No. 1 - No. 6)
- 23 Active Hyper Bass Sound button (A.HBS)  
SK/DK button (KS-RT70 G/GE)
- Press the following buttons (17 - 22) after the MODE button has been pressed and its indicator is lit red. 5 seconds after the completion of an operation, the MODE button's red indicator will go out.
- 17 Preset Scan (PS) button and indicator
- 18 Mono (MO) button and indicator
- 19 Dolby B NR (DO) button and indicator
- 20 Random (RND) button and indicator
- 21 Magazine select (-M) button and indicator
- 22 Magazine select (+M) button and indicator


## ■ Tape operation


Operate in the order shown.



### • Dolby B NR button

Set the Dolby B NR (  ) button as required after the MODE button has been pressed and its red indicator is lit.

ON -  indicator lights.

OFF -  indicator goes out.

### IGNITION KEY-OFF RELEASE (KEY-ON PLAY) MECHANISM

When the ignition key is turned off, this "key-off release" mechanism will automatically release the tape from the magnetic head. This will set the mechanism to the standby mode. When the key is turned on, it will automatically return to the playback mode.

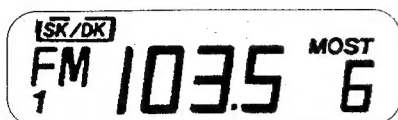
### TO FAST FORWARD AND REWIND THE TAPE

Press the FF button to fast forward the side being played back; when the end of the tape is detected, the tape is reversed and played back from the beginning of the other side. Press the REW button to rewind the tape. When the tape is rewound to the beginning, it is played back again. Lightly press the other PROG button to start play from the current position during the fast forward or rewind mode.

### AUTO-REVERSE MECHANISM

When the tape reaches the end of one side, this mechanism automatically switches over to play back the other side. To listen to the other side while playing one side, press the PROG buttons. The change in the tape transport direction can be checked from the Tape Direction indicators.

24



- 24 Indicators (for tuner section)  
 Band (FM1-FM2-FM3-AM)  
 Radio frequency  
 Preset Station  
 FM Stereo (ST)  
 Mono (MO)  
 SK/DK (KS-RT70 G/GE)  
 ---

25



- 25 Indicators (for tape deck section)  
 TAPE mode  
 Tape direction (◀▶)  
 Dolby B NR (□□)

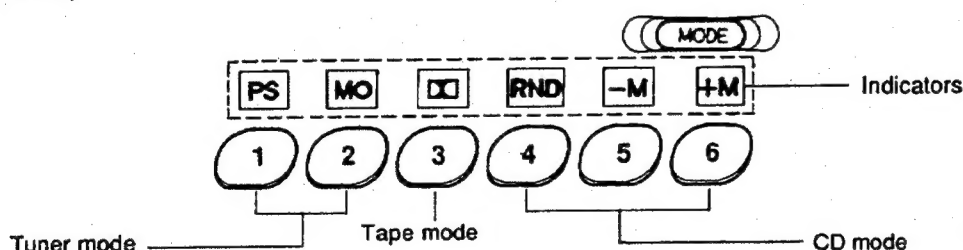
26



- 26 Indicators (for CD changer control)  
 Disc number  
 Track number  
 Magazine number  
 DISC  
 TRACK  
 MAG  
 RND  
 ---  
 ○E1 — ○E8

- 27 Indicator (for other controls)  
 Time  
 (⌚)  
 AOS

### Active-illuminated Operating System (AOS)



The indicators corresponding to each mode light up green in order to make operation simple. (For example, the PS and MO indicators light when the tuner mode is engaged. When the MODE button is pressed while engaged in the tuner mode, the PS and MO indicators blink. If one of the required mode buttons is pressed while the PS and MO are blinking, the corresponding operation mode is engaged.)

\*Each time the power is switched on, "AOS" is displayed.

#### \*AOS demonstration mode

In this mode, each of the AOS indicators alternately blinks.

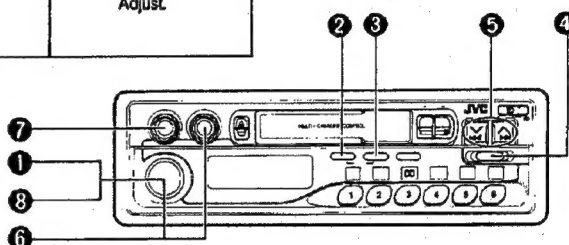
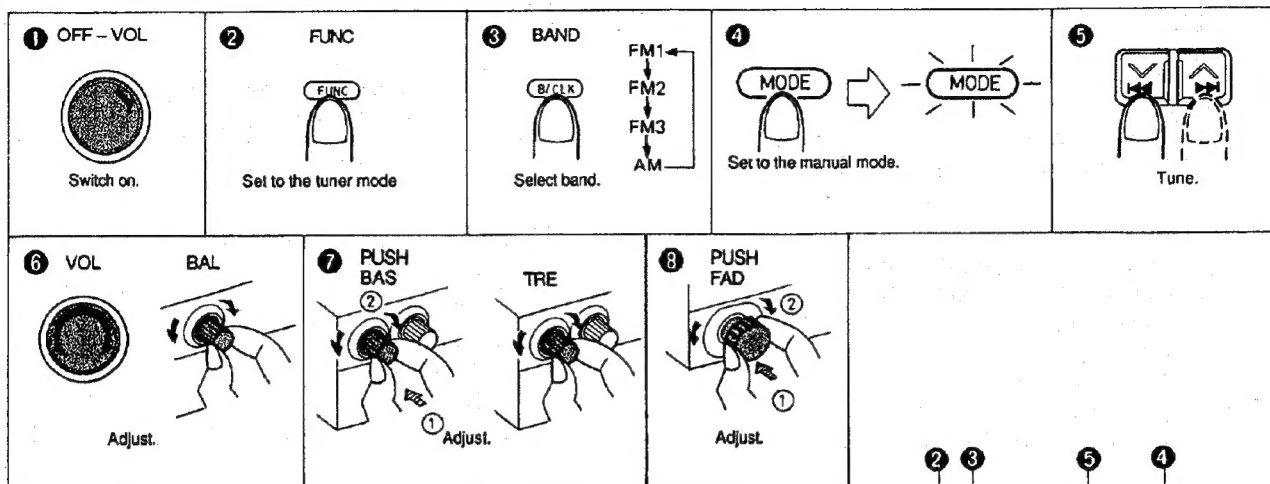
Press the preset station button (2) for more than 3 seconds while pressing the FUNC button, to set the AOS demonstration mode. When this unit is in AOS demonstration mode, normal operation of the KS-RT70 is possible, with functions being indicated in the display. (After the operation is completed, AOS demonstration mode will be resumed in 15 seconds.)

To cancel this mode, press the preset station button (2) for more than 3 seconds while pressing the FUNC button.



## Radio Operation

Operate In the order shown.

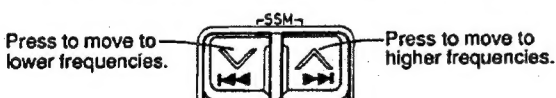


### MANUAL TUNING

Set to the manual mode using the MODE button. When the MODE button's light is red, the unit is in the manual mode. Then, by pressing the Tuning button, you can move up and down the frequency band. The frequency band is scanned as long as either button is pressed. You can step through the frequency in 50 kHz units for FM, 9 kHz units for MW and 1 kHz unit for LW.

In AM operation, the frequency moves continuously from the MW (522 - 1,620 kHz) to the LW (144 - 281 kHz) band and vice versa.

- When approx. 5 seconds have elapsed after completion of manual tuning operations, the unit switches back to the seek mode and the MODE button's red indicator goes out.



### SEEK TUNING

The unit is set to the seek mode when the MODE button's red indicator goes out. Then, by pressing the ^ or v button the unit tunes to the adjacent station with a higher or lower frequency.

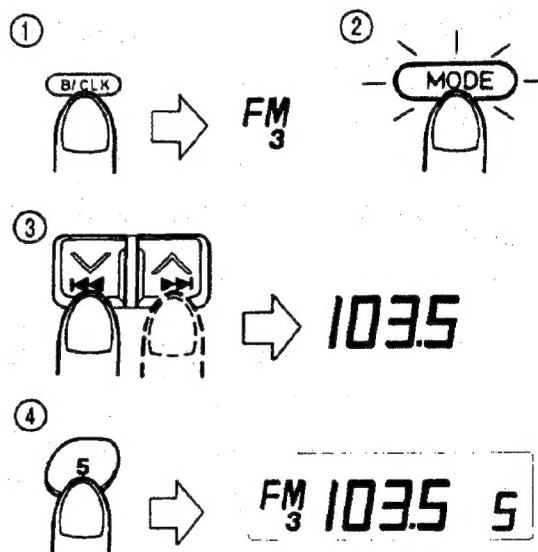
In AM operation, the frequency moves continuously from the MW to the LW band and vice versa.

### PRESET BUTTON TUNING

#### Presetting stations

6 stations in each band (FM1, FM2, FM3 and AM (MW/LW)) can be preset as follows;

- Example (when presetting Preset Station button "5" to FM station at 103.5 MHz)



- Select the FM3 band using the band (B) button.
  - Set to the manual mode.
  - Tune to the desired station.
  - Press Preset Station button "5" for more than 2 sec. (When "5" blinks in the Preset Station display, the station is preset.)
- Repeat the above procedure for each of the other 5 stations using a different Preset Station button each time.
  - Follow the above procedure for the other bands (FM1, FM2 and AM (MW/LW)).

#### Notes:

- The previous preset station is erased when a station is newly preset because the new station is stored in memory.



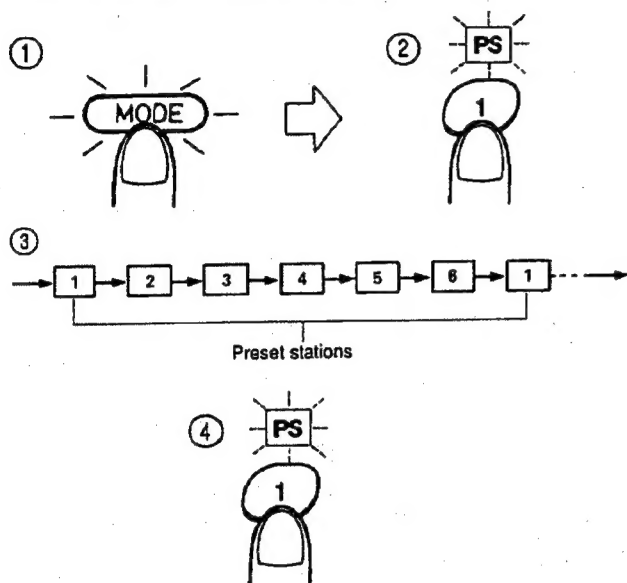
- The preset station is erased when the power supply to the memory circuit is interrupted during battery replacement, etc. When this occurs, preset the station again.

#### Preset tuning

- ① Select the band using the band (B) button.
- ② Press the required preset station buttons (No.1 - No.6).

#### PRESET SCAN BUTTON TUNING

This makes it possible to automatically scan preset FM and AM (MW/LW) stations



- ① Press the MODE button to light its red indicator.
- ② While the red indicator is lit, press the PS button.
- ③ Scanning is performed in the order of preset stations in each frequency band (FM1, FM2, FM3 and AM). Each preset station is heard for approx. 5 seconds.
- ④ When the required station is heard and its frequency is blinking, press the PS button again.

#### STRONG-STATION SEQUENTIAL MEMORY (SSM)

This function searches for FM and AM (MW/LW) stations broadcasting strong signals; the 6 strongest stations are held in memory in the order of increasing frequency and can be recalled with the preset buttons 1 - 6.

(Procedure)

- ① When the MODE button's red indicator goes out, press the SSM buttons (V, ^) for more than 3 seconds.

- ② The 6 strongest signals in the band to which you are listening (FM1, FM2, FM3 and AM (MW/LW)) will be searched and selected automatically. These 6 stations are preset in the preset buttons (1 - 6) in the order of increasing frequency. (During this operation "----" lights in the display.)  
The receiver then tunes to the broadcast stored in preset button "1" automatically.

#### Note:

Previously preset stations are cancelled automatically when SSM is used.

#### MONO BUTTON

When listening to FM, set the MO button to stereo or mono after the MODE button has been pressed and its red indicator is lit.

#### Note:

Set to mono when a stereo FM broadcast is too noisy and cannot be heard satisfactorily.

#### RECEIVING TRAFFIC INFORMATION BROADCASTS (G/GE version only)

1. Select the FM1, FM2 or FM3 band using the Band (B) button.
2. Press the SK/DK button for more than 1 second before operation. The SK/DK indicator lights.
3. Perform Seek Tuning to search for a station broadcasting traffic information. When such a station is received, the **SK/DK** indicator will light and the broadcast can be heard.
4. As long as the radio is set to receive the traffic information station, even if you are listening to a cassette tape or CD, when traffic information is broadcast, it will automatically be heard, and once the broadcast is over, sound from the cassette or CD will automatically be restored. Even when listening to a cassette tape or CD, if the signal from the current traffic information station becomes weak, a stronger traffic information station is searched automatically.

#### Notes:

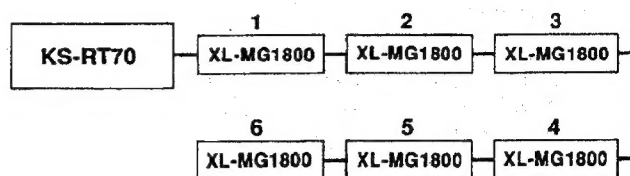
1. You can only operate the SK/DK button in the FM mode.
2. When listening to an FM broadcast, if the tuner is not set to a traffic information station approx. 5 seconds later an alarm tone will be heard; if the reception is poor, the alarm will occur after 30 seconds. In such a case, perform Seek Tuning or press the SK/DK button for more than 1 second.

## ■ CD Automatic Changer Operation

### PRECAUTIONS

- This unit is for the control of JVC Compact Disc Automatic Changers which must be purchased separately (applicable models; XL-MK500/MG700RF/MG1800).
- For use, refer to the instructions of the CD automatic changer.
- When a cassette tape is loaded while listening to a CD, CD playback is automatically switched to cassette playback.
- When there is no disc in the disc magazine of the CD automatic changer or when the disc is inserted into the tray upside down, the "----" will be shown in the KS-RT70 display. In such a case, remove the disc magazine from the CD changer and set the discs correctly.
- When "○ E1 - ○ E7" is shown in the display of the KS-RT70, press the RESET button of the CD changer. When "○ E8" is shown, confirm that the connections have been made securely.  
\* The "○" shows the number of the CD changers connected to the KS-RT70.

Example: When 6 XL-MG1800 changers are connected.



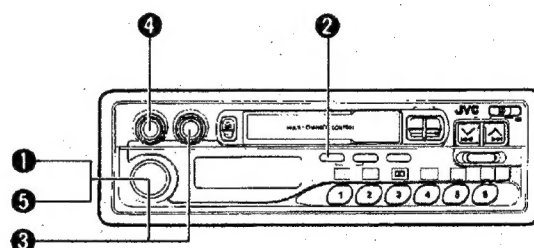
("5E1" means that the 5th CD changer is the cause of the trouble.)

### PLAYING COMPACT DISCS

To play all tunes

Operate in the order shown.

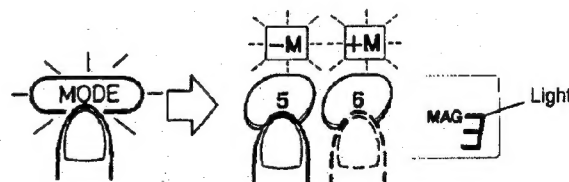
<b>1 OFF - VOL</b>  Switch on.	<b>2 FUNC</b>  Set to the CD mode.	<b>3 VOL</b> BAL  Adjust.	<b>4 PUSH BAS</b> TRE  ① Adjust.
<b>5 PUSH FAD</b>  Adjust.	<div style="text-align: center;">           Track (tune) number              Disc number      Magazine number         </div>		



- After the last tune of the first disc has been played, the disc on the next tray automatically starts from its beginning. If there is no disc on the tray, the display shows the "----" and the following disc is played.

### MAGAZINE SELECTION

- **Magazine select button**  
Press the magazine select button (+M/-M) after the MODE button has been pressed and its red indicator is lit to select the required magazine.  
(Example: to select the 3rd magazine with the XL-MG1800 changer connected.)



- When selecting the 10th or higher magazine with four or more XL-MG1800 changers connected, the unit's digit of the magazine number blinks.  
For example, when the 18th magazine is being selected, the "8" blinks.

## DISC SELECTION

### • Direct Disc Selection

Use the disc No. buttons (1 - 6) to select the required disc from the magazine, the number of which is shown in the display. Press the disc No. button (1 - 6) corresponding to the No. of the required disc. CD play starts when the disc No. and track No. indicator light.

Example : (to designate Disc 5)



## SKIP PLAYBACK

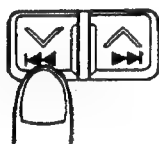
- During playback, when skipping to the beginning of the next tune or the tune being played back or the previous tune, the beginning of the tune is easily located and the playback starts from there.

To listen to the next tune ...

Press the ►► button once to skip to the beginning of the next tune.

To listen to the previous tune ...

Press the ◄◄ button to skip to the beginning of the tune being played back and press again to skip to the previous tune.



- When the magazine select, disc select and skip operations are performed in sequence, the required tune from the required disc can be selected.

## SEARCH PLAYBACK (to locate the required position on the disc)

- The required position can be located using fast-forward or reverse search during playback.
- Hold down the button and the search playback starts slowly and then gradually increases speed.
- Since a small sound (about one quarter of playback level) can be audible in both modes, release the button when the required position is located while monitoring the sound.



## RANDOM PLAYBACK

Each time the RND button is pressed after the MODE button has been pressed and its red indicator is lit, the mode is changed from Random 1 mode (the RND indicator lights) to Random 2 mode (the RND indicator blinks) to clear mode, in this order.

### Random 1:

Plays all tunes on the disc currently being played back once, in random order, then tunes from the subsequent disc in their order on the disc.

### Random 2:

Randomly selects a disc other than the one currently being played, a tune on this disc is selected at random, and it is played.

## Digital Clock Display

- Selectable between the clock display on or off.

When listening to a tape (or CD), each time the CLK button is pressed, the time mode or tape (or CD) mode can be selected.

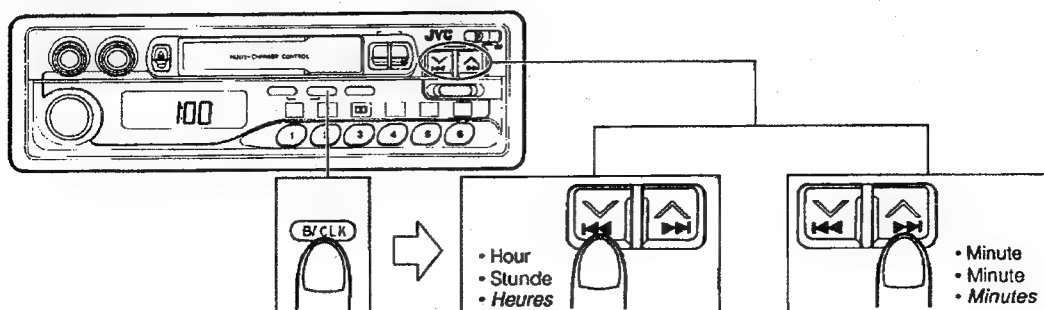
When the unit is in the tuner mode, press the CLK button for more than 2 seconds to select the time mode.

When the tuner or CD is operated in the time mode, the display will switch to tuner or CD mode, then, after a brief period will return to the time mode.

When listening to a tape, "TAPE" or time mode is shown on the display.

### • To adjust the time

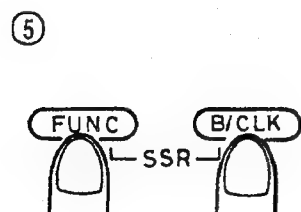
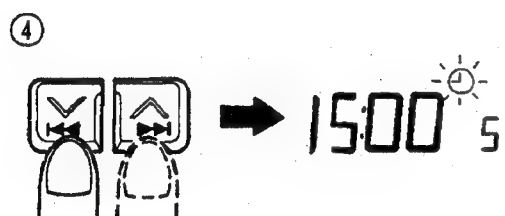
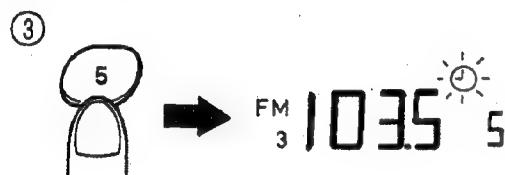
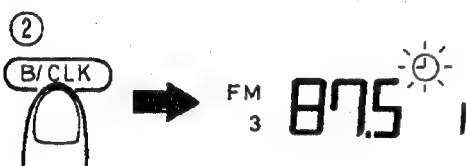
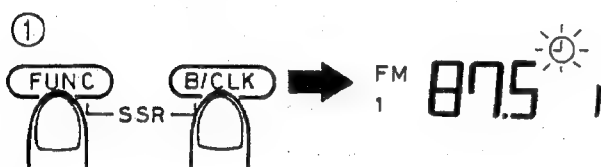
When the display is in time mode, while keeping the CLK button pressed, press the Hour adjustment button (▼) to adjust the "hours", and the Minute adjustment button (▲) to adjust the "minutes."



## ■ Special-Preset Station Reserver (SSR)

The SSR (Special-preset Station Reserve) automatically tunes in to any FM or AM preset program once a day, at a programmed time from any of the operating modes; tuner, tape, or CD. This function guarantees that you will not miss important information such as weather reports or traffic information, etc.

- Set current time before using the SSR. (See page 36.)
- The station must be preset before using the SSR. (See page 24.)
- Example: When setting the FM station which has been preset to the preset button (5) of the FM3 band to 15:00.



### (Procedure)


- ① While pressing the FUNC button, press the B/CLK button for more than 2 seconds to preset a program. ("⌚" indicator blinks.)
  - Perform the next operation while the "⌚" indicator blinks.)
- ② Select the required band (i.e. FM3 in the example) using the band (B) button.
- ③ Select the required station (i.e. 5) which has been preset using the preset station button.
- ④ Set the required time (i.e. 15:00) using the time adjustment buttons.
- ⑤ Press the B/CLK button for more than 2 seconds while pressing the FUNC button, to preset the SSR. (Presetting is completed when the preset band, frequency and time indicators blink and "⌚" indicator lights.)

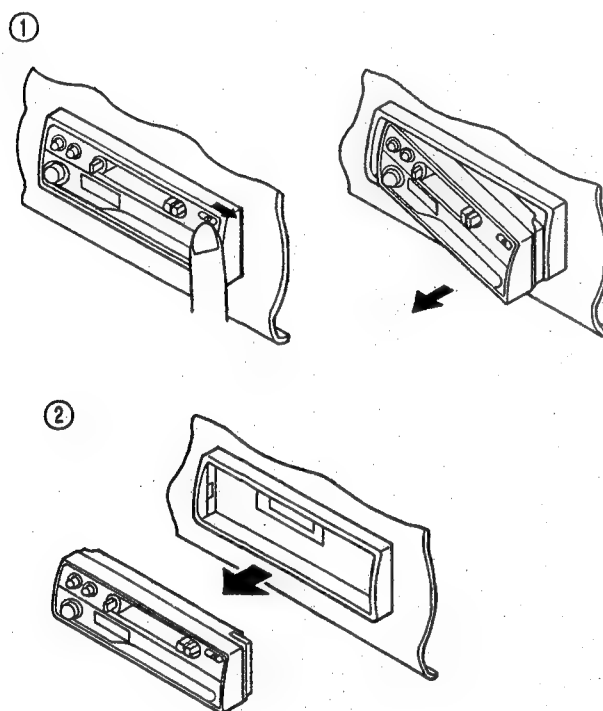
- If the "⌚" indicator stops blinking during presetting, perform the operation again from procedure ①.
- While the FUNC button is pressed, press the B/CLK button once to check the preset program.
- Press the B/CLK button for more than 2 seconds while pressing the FUNC button to cancel the SSR mode. (The "⌚" indicator is goes out.)

### Notes:

- Once the SSR has been set, the start time and broadcast station are stored in the microprocessor. When changing the start time and/or broadcast station, perform procedures ① to ④ again.
- After setting the SSR, if a preset station is changed, the renewed station is stored in the program station of the SSR.

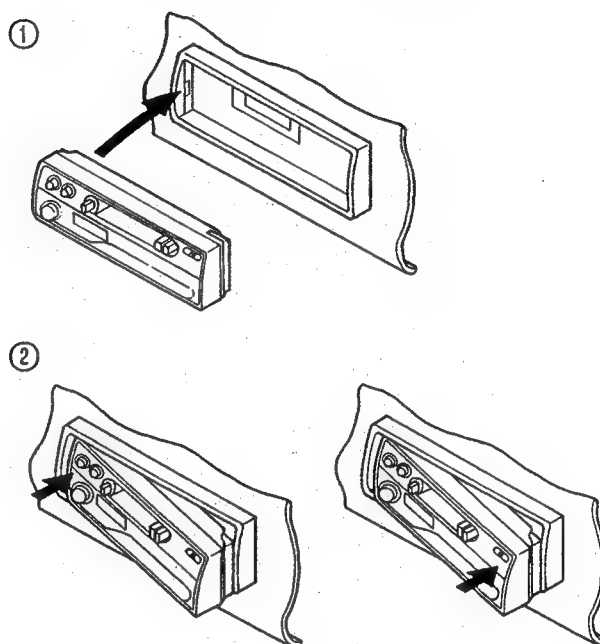
## ■ To Detach The Control Panel

- ① Slide the control panel release (  ) switch in the direction of arrow to detach the control panel.
- ② Pull the control panel out of the main unit as shown in the figure below.
  - After detaching the control panel, put it in the case provided for protection.



## ■ To Attach The Control Panel

- ① Align the left side of the control panel to the left side of the holder.
- ② Press the left side of the control panel first, then press the right side to set correctly.



### Note:

- Be careful not to damage the connector terminals when attaching/detaching the control panel or while the control panel is detached.

# 1 Location of Main Parts

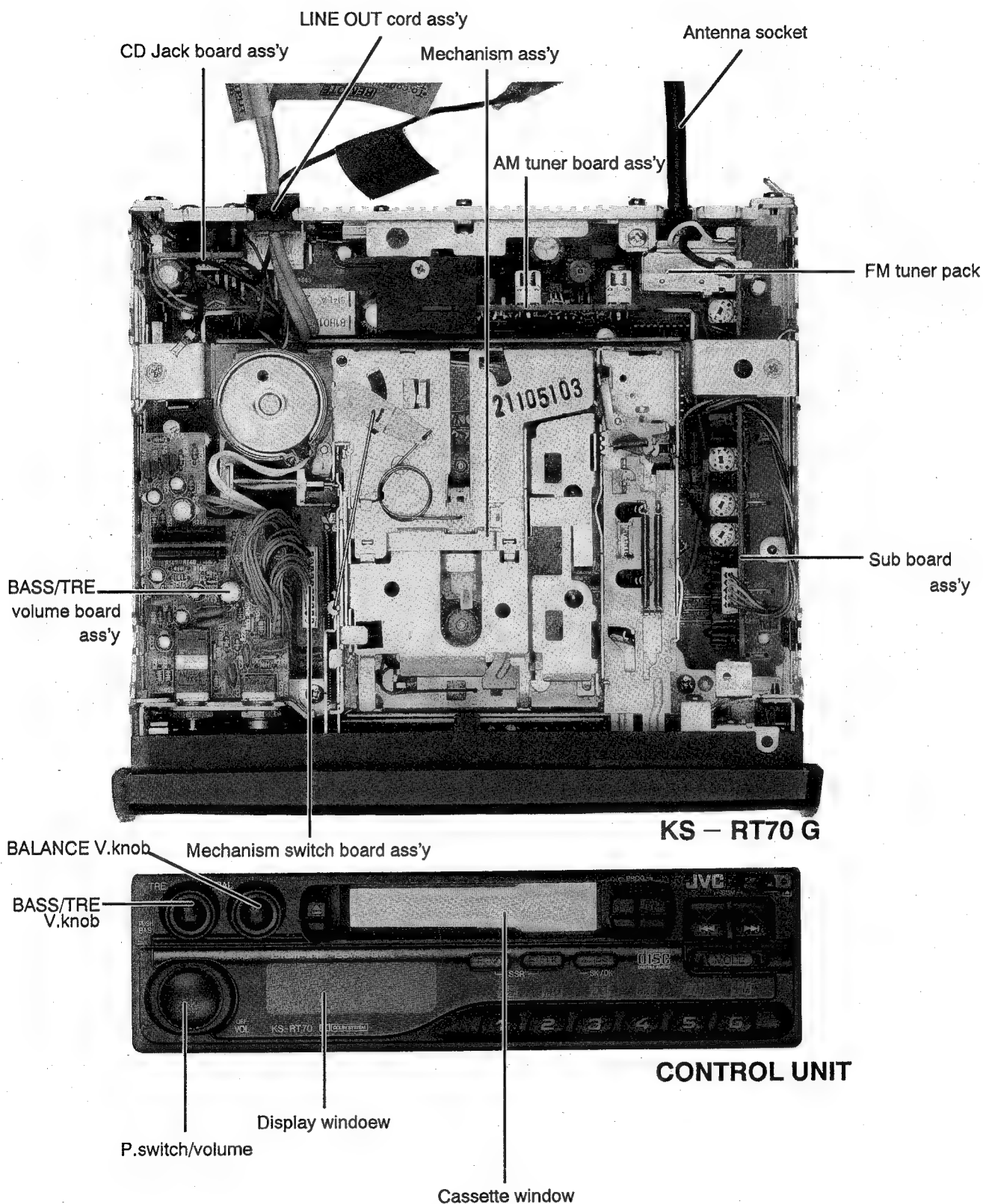


Fig 1 - 1

## 2 Removal of Main parts

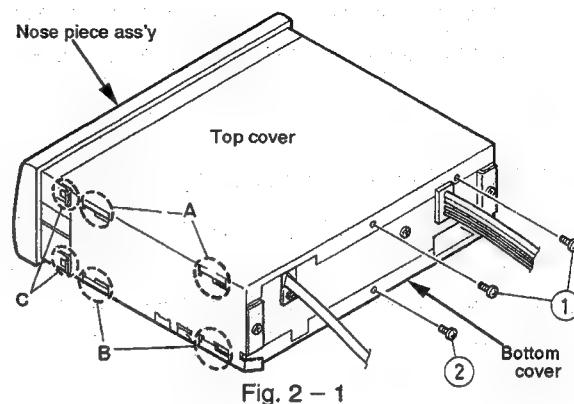
### ■ Enclosure section

#### ◆ Top cover(see Fig.2-1)

1. Remove the two screws ① retaining the top cover from backward.
2. Remove the four claws A on the right and left side retaining the top cover.

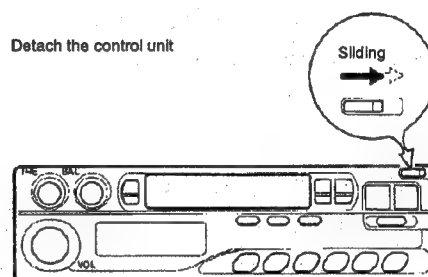
#### ◆ Bottom cover(see Fig.2-1)

1. Remove the one screw ② retaining the bottom cover from backward.
2. Remove the four claws B on the right and left side retaining the bottom cover.



#### ◆ Control unit(see Fig.2-2)

1. Remove the release switch knob by sliding to the right side.

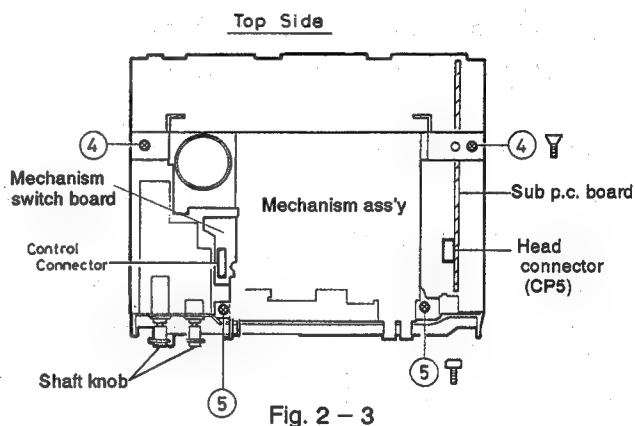


#### ◆ nose piece ass'y(see Fig.2-1)

1. Remove the four claws C on the right and left side.
- ★ The nose piece ass'y is connected to the main p.c.board by a connector under the [PROG] button on the right side of the mechanism. Dismount the nose piece ass'y by pulling it in straight direction.

#### ◆ Mechanism ass'y(see Fig.2-3)

1. Remove the four screws ④ and ⑤ retaining the mechanism ass'y.
2. Disconnect two connectors, namely, the head wire connector(CP5) from the sub p.c. board ass'y and control connector from the mechanism switch board ass'y.
3. Pull out the mechanism ass'y toward the top side.



#### ◆ Volume board ass'y(See Fig. 2-3 and Fig. 2-4)

1. Remove the mechanism ass'y
2. Remove the shaft knobs(knob joint).(see Fig2 - 3)
3. Remove the nuts retaining the BASS/TRE volume and pull out it backward(see Fig.2 - 4).

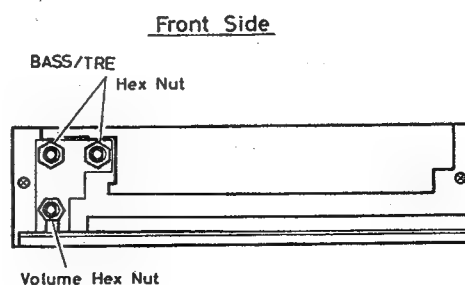


Fig. 2 - 4



#### ◆ AM p. c. board ass'y(see Fig. 2-5)

1. Remove the one screw ⑥ retaining the board holder.
2. Pull out the AM p. c. board ass'y toward the top side.

#### ◆ SUB p. c. board ass'y(see Fig. 2-6)

1. Remove the one screw ⑦ retaining the FM antenna cord ass'y.
2. Remove the one screw ⑧ retaining the FM tuner pack bracket.

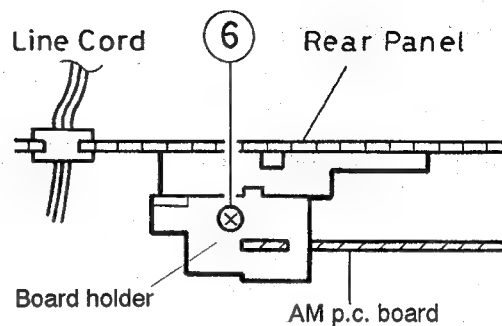


Fig. 2 - 5

#### ◆ CD DIN jack ass'y(see Fig. 2-6)

1. Remove the two screws ⑨ retaining the CD jack ass'y.

#### ◆ Front bracket(see Fig. 2-7)

1. Remove the two screws ⑩ retaining the front bracket.
2. Remove the shaft knob(knob joint)(see Fig. 2 - 3).
3. Remove the nut retaining the volume.

★ Under these conditions, it will be possible to change the parts on the main p. c. board ass'y.

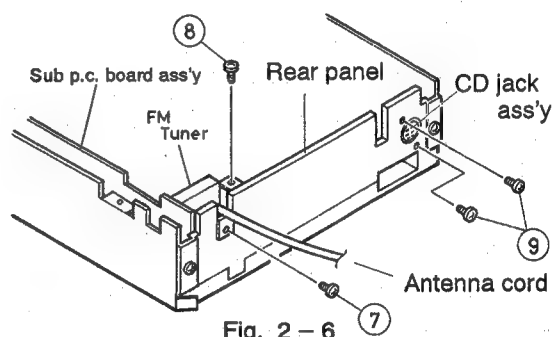


Fig. 2 - 6

#### ◆ Main board ass'y

1. Remove the two screws retaining the front power IC and I/O connector(11pin).
2. Remove the one screw retaining the main board ass'y from bottom side and unsolder the main board to chassis.

#### ◆ Control unit(see Fig. 2-8)

1. Remove the seven screws ⑪ retaining the cover.

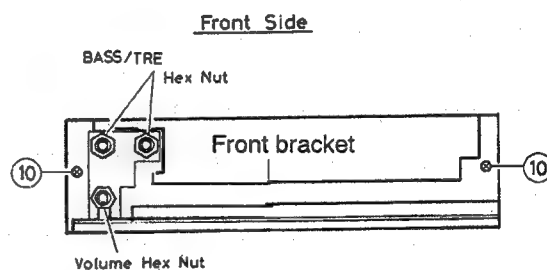


Fig. 2 - 7

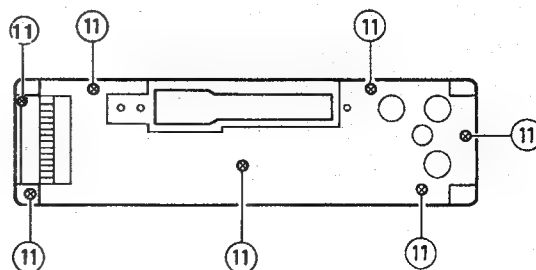


Fig. 2 - 8

## ■ Mechanism Section

### ◆ Head Removal(See Fig. 2-9 and 2-10)

1. Remove screw ① retaining the FR lever assembly.
2. Left the FR lever assembly up in the direction of the arrow and remove the FR lever assembly from the chassis slots(groove).
3. Remove the screw ② retaining the head plate.
4. Remove two screws ③ retaining the head.
5. When replacing the head make sure to adjust screws(A-D) and perform head angle and height adjustment.

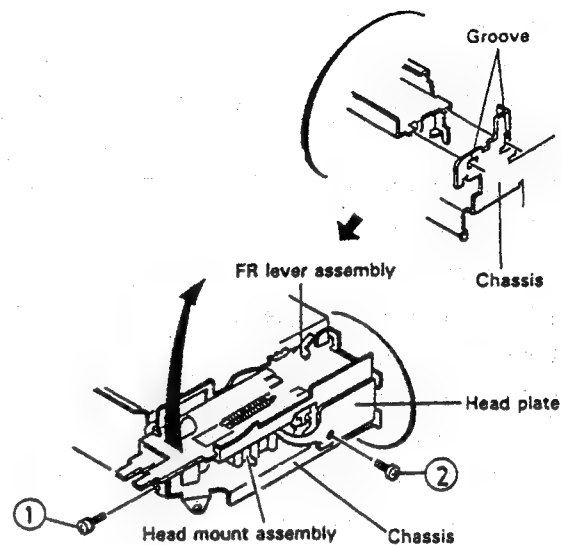


Fig. 2 – 9

### ◆ Pinch roller assembly(See Fig. 2-10)

1. Remove the nylon washers retaining the left and right pinch rollers.
2. Pull out the pinch roller.

### ◆ Motor Assembly(See Fig. 2-11)

Remove two screws(5) retaining the motor assembly.

※ This operation is facilitated by leaving the belt hooked on to one of the chassis protrusions.

### ◆ Belt(See Fig. 2-11)

Thread the belt as indicated in the figure when replacing the belt.

※ Take care to avoid contact with grease or oil when replacing the belt.

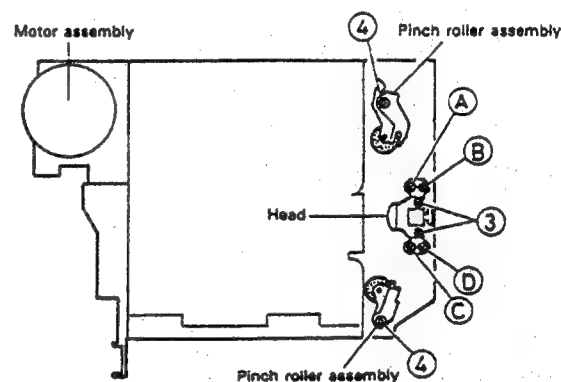


Fig. 2 – 10

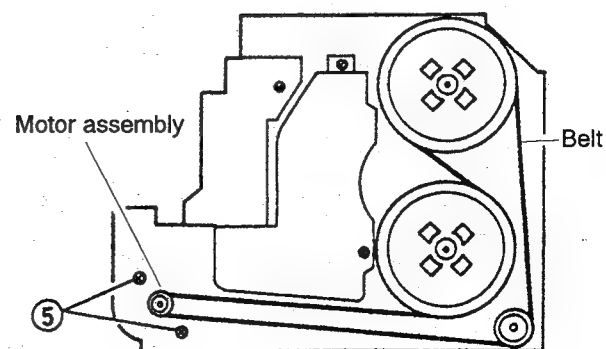


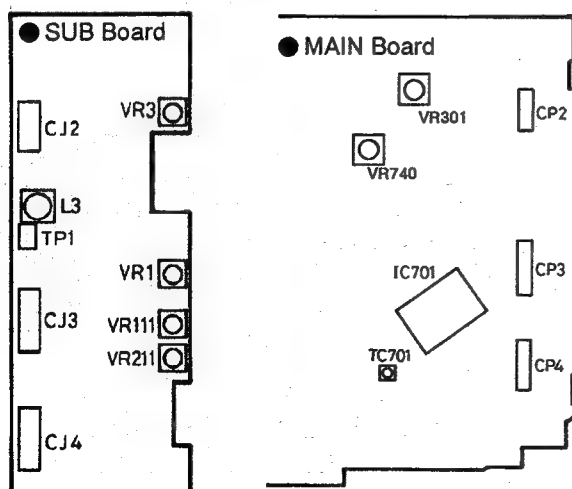
Fig. 2 – 11

### 3 Main Adjustment

#### Equipment and measuring instruments used for adjustment

- Electronic voltmeter
- Audio frequency oscillator  
(range:50~20kHz and output 0 dB with impedance of 600  $\Omega$  )
- Attenuator(impedance;600  $\Omega$  )
- Frequency counter
- AM Standard signal generator
- FM Standard signal generator
- Wow flutter meter
- Torque testing cassette gauge  
CTG - N (mechanical adjusting)  
TW - 2111A (FWD play)  
TW - 2121A (REV play)
- Standard tape  
VTT704(head azimuth adj.)  
VTT712(tape speed, wow&flutter adj.)  
VTT724(reference level )  
VTT736(playback frequency response )  
VTT721(output level)  
SCC - 1659 (mirror tape)  
MTT - 942SP (azimuth)

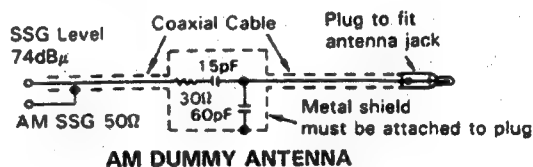
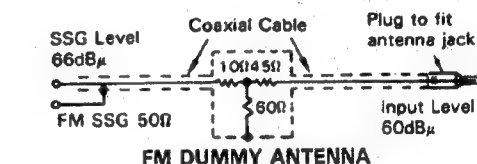
#### Location of Adjustment



#### Condition for measurement

- Power Supply ..... DC14.4V  
(Reduced Voltage:10.5V)
- Load ..... 4  $\Omega$   
(Tow speaker connection)
- BASS/TRE, FADER ..... Center
- Main volume ..... Position with an output level of 1.4V during VTT724 playback
- Tuner section
  - **[FM]**;400Hz, 22.5kHz deviation
  - **[FM]** STEREO ;1kHz, 67.5kHz deviation, pilot signal 7.5kHz
  - **[AM]**;400Hz, 30% modulation
  - Output impedance ;50  $\Omega$

#### Dummy antenna



#### Preset memory Initialization

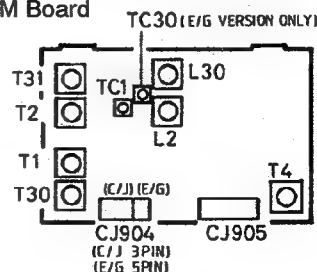
Band	Preset Memory					
	M1	M2	M3	M4	M5	M6
FM(MHz)	87.5	89.9	97.9	105.9	108	87.5
AM(kHz)	144	153	522	603	1404	1620

#### Manual Tuning Up/Down Frequency

**[FM]**;50kHz Step

**[AM]**;9kHz Step

#### AM Board

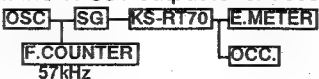


# Tape section adjustment

Item	Conditions	Adjustment and Confirmation methods	S.Values	Adjust
1. Head azimuth adjustment	Test tape: SCC - 1659  MTT942SP(10kHz)	<p>★ In case the head and its height have been changed, it will be necessary to adjust the height of the head.</p> <p>1. Adjustment of the height of head</p> <p>1) When the mirror tape SCC - 1659(2-line tape) is travelling in the FWD direction, adjust the screws A and B so that the line A is located the center of the shield plate between the head channels.</p> <p>2) When the mirror tape SCC - 1659(2-line tape) is travelling in the REV direction, adjust the screws C and D so that the line B is located the center of the shield plate between the head channels.</p> <p>2. Head azimuth</p> <p>1) Adjust the screw B so that the output level becomes maximum (L-R difference level to be within 2 dB) and the phase difference becomes minimum (less than <math>90^\circ</math>) when MTT942SP is travelling in the FWD direction.</p> <p>2) Adjust the screw C so that the output level become maximum (L-R difference level to be within 2-dB) and the phase difference become minimum (less than <math>90^\circ</math>) when MTT942SP is travelling in the REV direction.</p> <p>3) By repeating the above adjustment steps 1) and 2), make sure that the output level and phase difference are as specified respectively.</p> <p>4) There is no need to perform bonding after adjustment.</p>	<p>Head shield</p> <p>The head is at low position during FWD.</p> <p>Head shield</p> <p>The head is at high position during REV.</p> <p>Output level: Maximum</p> <p>Output level: Maximum</p> <p>phase</p> <p>(<math>0^\circ</math>)</p> <p>(<math>90^\circ</math>)</p>	<p>A Line</p> <p>B Line</p> <p>screw - D</p> <p>screw - C</p>
2. Tape speed and wow flutter confirmation	Test tape: VTT712 (3kHz)	<p>1. Check to see if the reading of the F. counter/wow flutter meter is within 3015~3045 (FWD/REV), and less than 0.35% (JIS RMS).</p> <p>2. In case of out of specification, adjust the motor with a built-in volume resistor.</p>	<p>Tape speed: 3015 ~3045Hz</p> <p>Wow flutter: less than 0.35%</p>	Built-in volume resistor
3. Playback frequency response confirmation	Test tape: VTT724 (1kHz) VTT736 (125Hz/1kHz/8kHz)	<p>1. Play test tape VTT724, and set the volume position at 1.4 V</p> <p>2. Play test tape VTT736 and confirm 1kHz/8kHz: <math>0 \pm 3\text{dB}</math>, 1kHz/125Hz: <math>0 \pm 3\text{dB}</math>.</p> <p>3. When 8 kHz is out of specification, it will be necessary to read adjust the azimuth</p>	<p>Speaker out</p> <p>1kHz/125Hz: <math>0 \pm 3\text{dB}</math></p> <p>1kHz/8kHz: <math>0 \pm 3\text{dB}</math></p>	

Item	Conditions	Adjustment and Confirmation methods	S.Values	Adjust
4.Maximum output power confirmation	Test tape :VTT721 (1kHz) volume:maximum BASS/TRE:center	1. Confirm the rear output be more than 9V((20W). 2. Confirm the front output be more than 5.3V(7W) 3. Confirm that consumption current at above condition to be less than 5A. 4. Sound leakage should not occur at volume minimum. 5. Oscillation should not occur at BASS/TRE at maximum.	Output level:more than 20W(9V) and 7W(5.3V) Consumption current :less than 5A	
5. DOLBY NR level adj.	Test tape:VTT724 (1kHz) Test point : TP911	1. Playback the test tape VTT724,Adjust VR111/VT211 so that the output level at terminal TP911 is 318mV. 2. Playback the non – signal recorded portion and turn on and off the DOLBY switch repeatedly while making sure that level difference at TP911 is 8.5dB more.	DOLBY B 318mV	Lch :VR111 Rch :VR211

### ■ Tuner section adjustment

Item	Conditions	Adjustment and Confirmation methods	S.Values	Adjust
1.Radio/Tape level difference	AM 1000 kHz, 1kHz, 30% modulation, 74dB $\mu$	Against VTT724, the output difference level to be within – 7 to $\pm 3$ dB	within – 7 to $\pm 3$ dB	
2.FM 0V adjustment	Test point: TP1 FM 97.9MHz, 66 dB non modulation	Adjust L50 so that the TP1 DC voltage level become 0 V when 97.9 MHz is indicated.	0 $\pm$ 10mV	L50
3.Clock frequency adjustment	Test point: TP4 AM 1710 kHz F Counter	When indication AM 1710 kHz, adjust TC701 so that the TP4 reading becomes 2,160 $\pm$ 0.005 kHz. Note: 1.Clock adjustment to be done after aligning tuner (To get higher accuracy). 2.High impedance can to be use.	2,160 $\pm$ 0.005 kHz	TC701
4.FM seek stop adjustment	Test point:TP701 FM97.9mHz,30dB $\mu$ (non – modulated)	Adust VR740 so that SD is set exactly from 0V to 5V with the SSG 97.9mHz 30dB $\mu$ V.	0V to 5V	VR740
5.Separation adjustment	TP:AFout FM97.9MHz,66dB $\mu$ (1kHz,67.5kHz Dev. 7.5kHzDev.)	1. With signal of 97.9MHz,66dB $\mu$ supplied from the signal generator to L or R channel. 2. Adjust VR1 to minimize leak of a channel's output to other channel .	minimum	VR1
6.BLEND adjustment	TP:AFout FM97.9MHz,52dB $\mu$ (1kHz,67.5kHz Dev, 7.5kHz Dev)	1. With signal of 97.9MHz,66dB $\mu$ supplied from the signal generator to L or R channel. 2.Adjust VR3 so that speaker output level of the other channel becomes 20dB and signal levels of the two channels are balanced.	20dB	VR3
7.SK Filter adjustment	FM:97.9MHz SK signal modulation 66dB $\mu$ V (set modulation to 10% less)	While receiving SK signal, adjust VR301 so that the TP301 output level become maximum. 	Maximum	VR301W

# 4 Wiring Connections

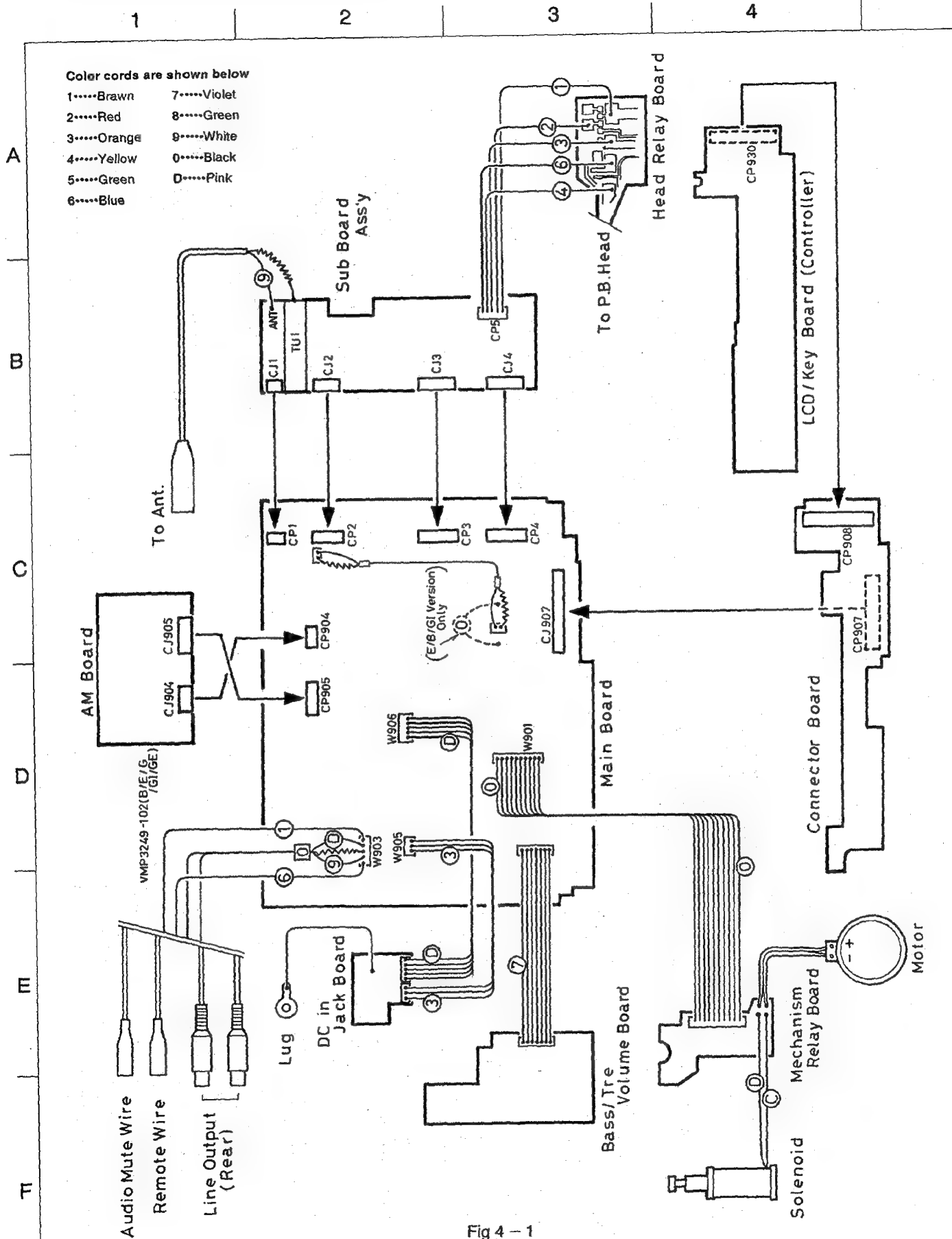


Fig 4 - 1

# 5 Block Diagram

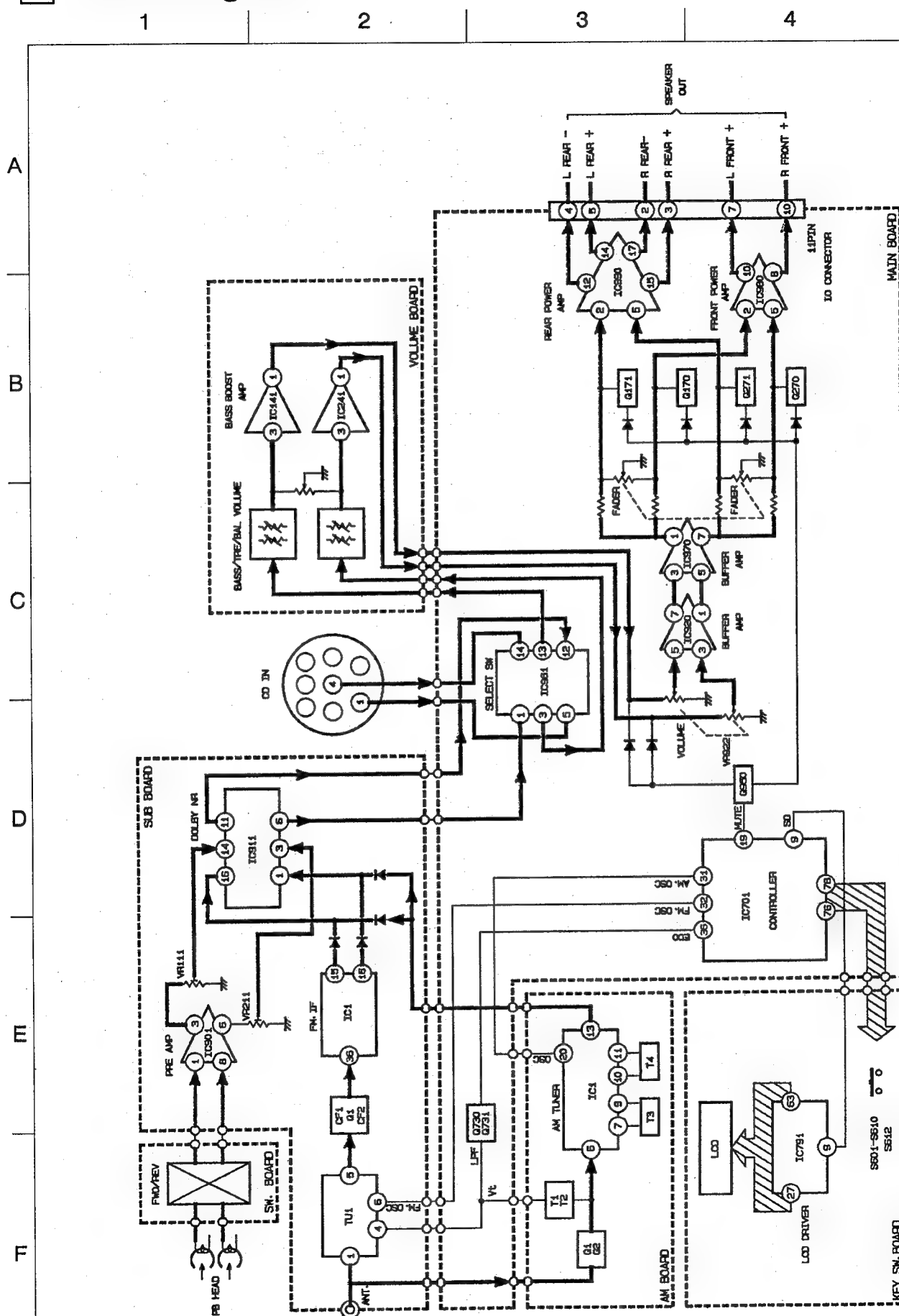


Fig 5 - 1

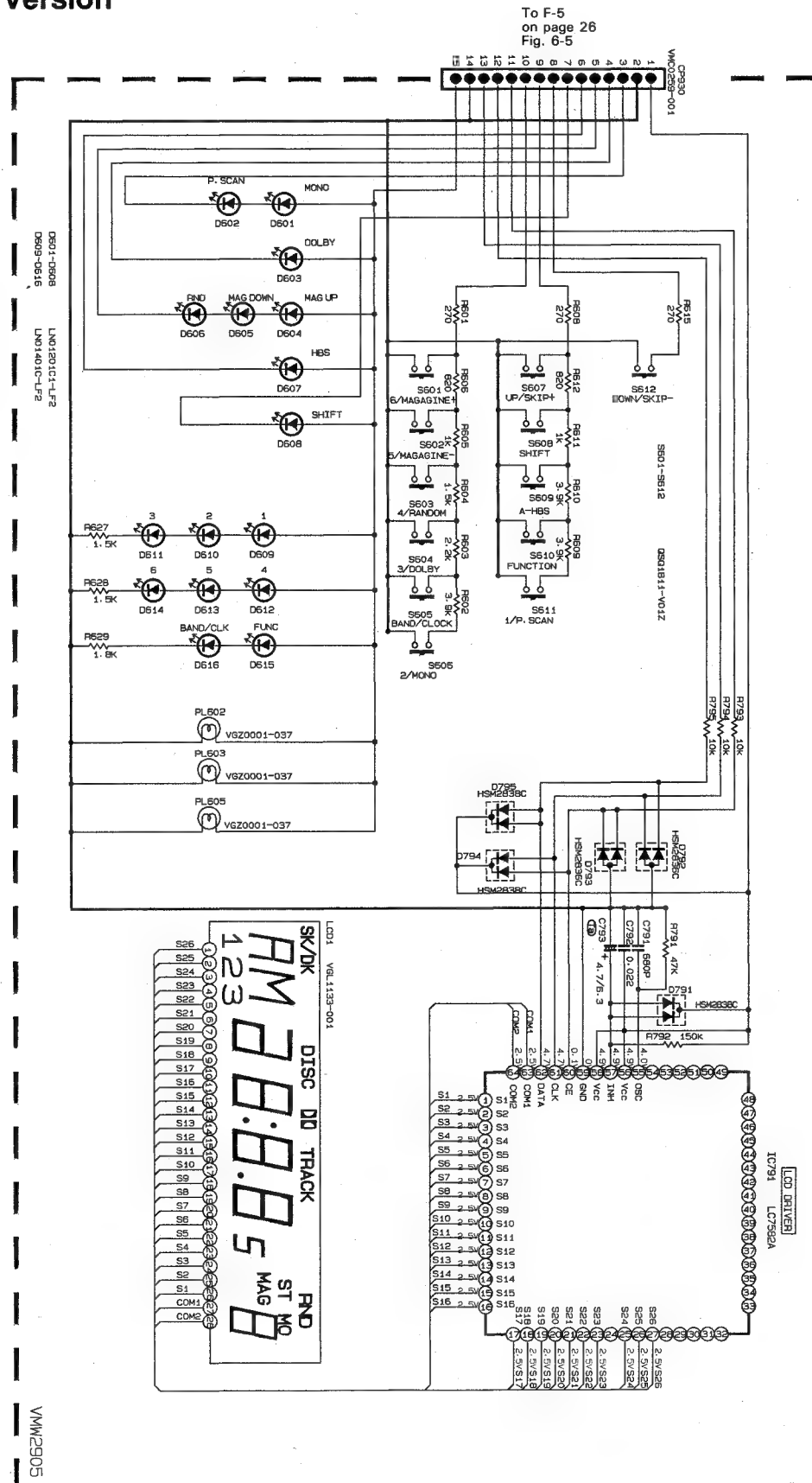


# 6 Standard Schematic Diagram

## Display/Key Circuit

### B/E/GI Version

NOTES:  
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLTMETER WITHOUT INPUT SIGNAL.  
2. UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/8W 1% CARBON RESISTOR.  
ALL RESISTORS ARE 1/8W 1% METAL GLAZE RESISTOR.  
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.  
ALL CAPACITANCE VALUES ARE IN PICOFARADS (P).  
ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE/P/RAVED VOLTAGE (V).



### G/GE Version

NOTES:  
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLTMETER WITHOUT INPUT SIGNAL.  
2. UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/8W 1% CARBON RESISTOR.  
ALL RESISTORS ARE 1/8W 1% METAL GLAZE RESISTOR.  
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.  
ALL CAPACITANCE VALUES ARE IN PICOFARADS (P).  
ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE/P/RAVED VOLTAGE (V).

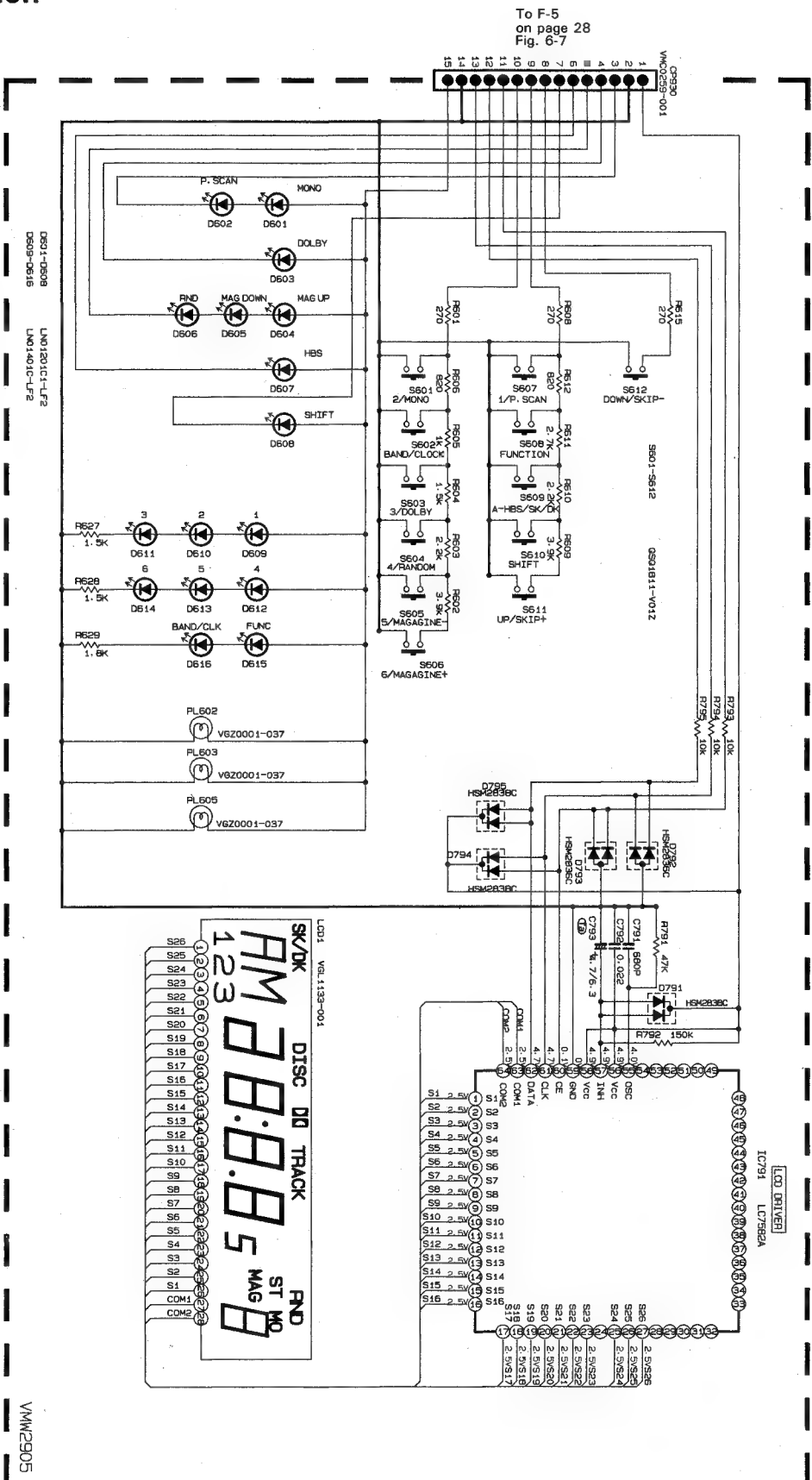


Fig 6 - 1

Fig 6 - 2

### ■ Tuner/Preamplifier circuit (B/E/GI Version)

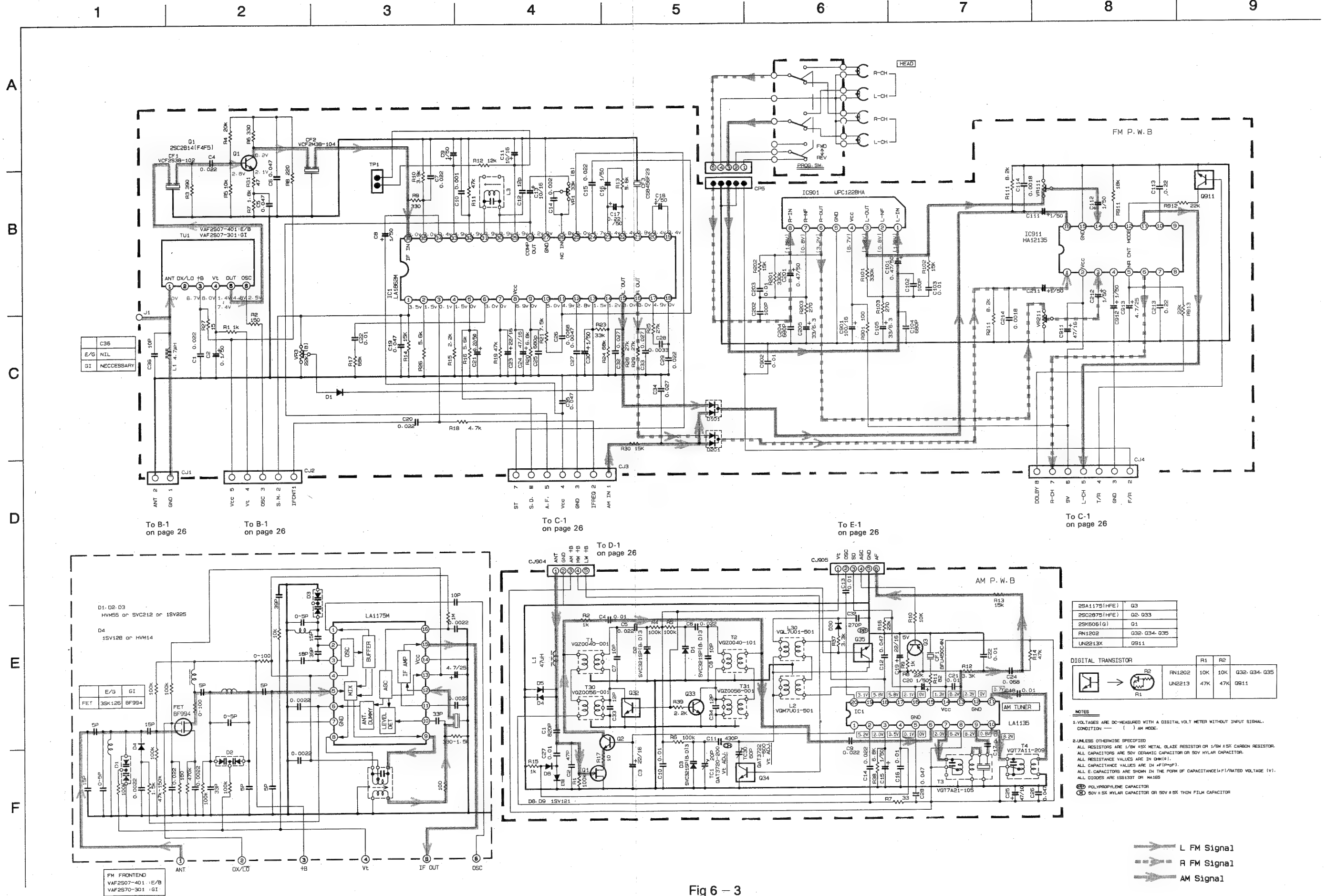


Fig 6 - 3



## System Control Circuit (B/E/GI Version)

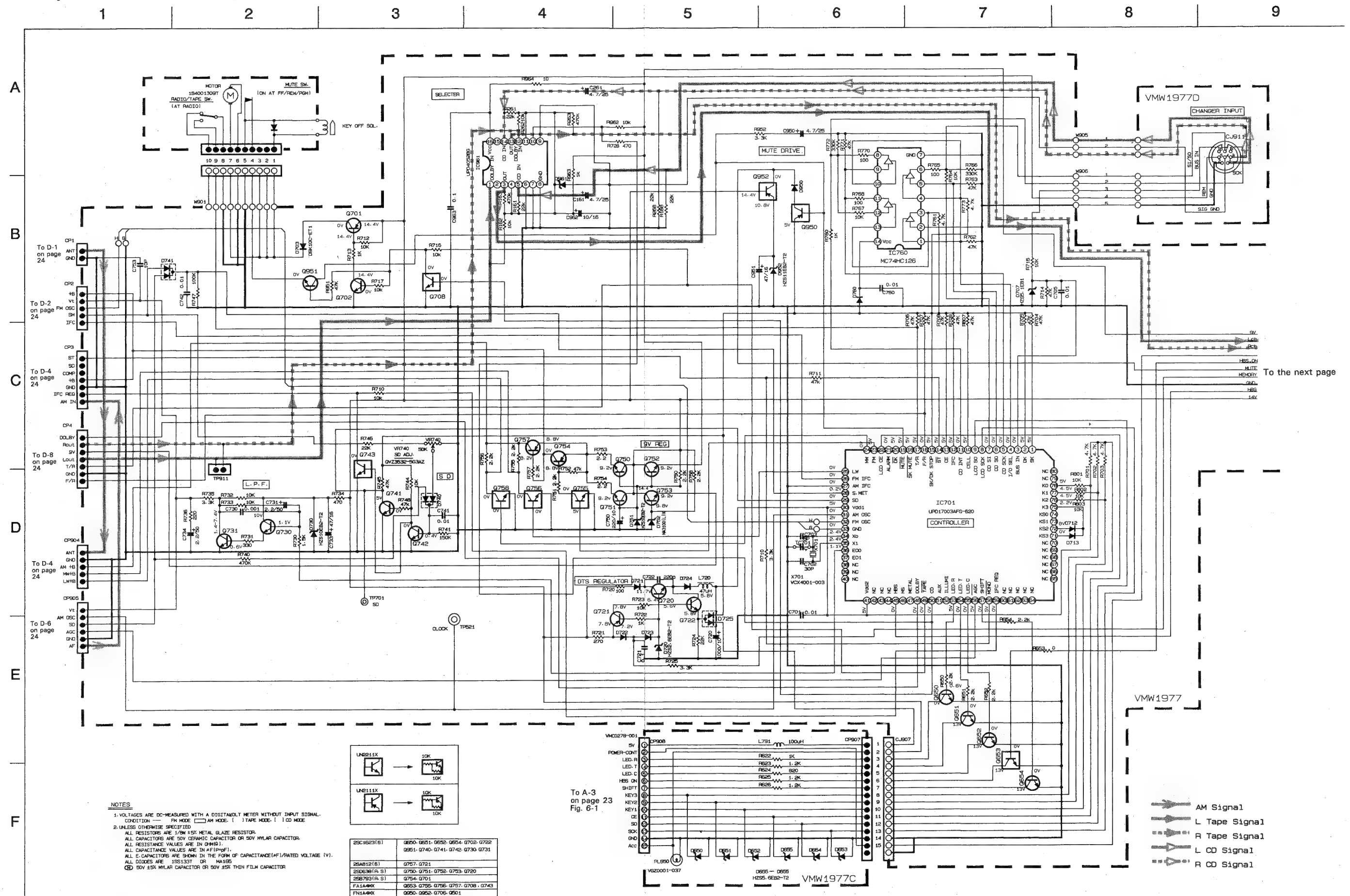


Fig 6 - 5

## ■ Power Amplifier Circuit (B/E/GI version)

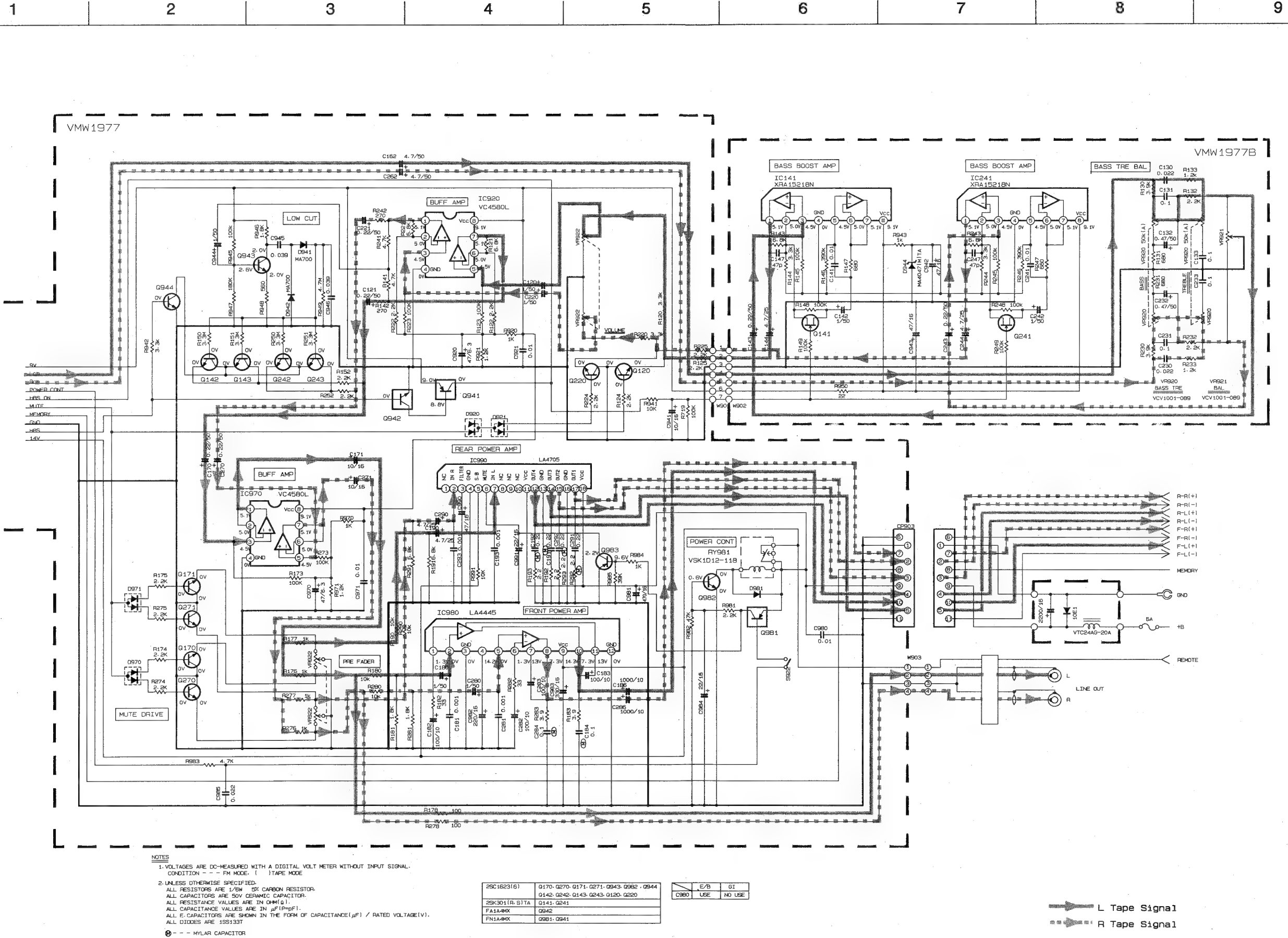


Fig 6 - 6



## ■ System Control Circuit (G/GE Version )

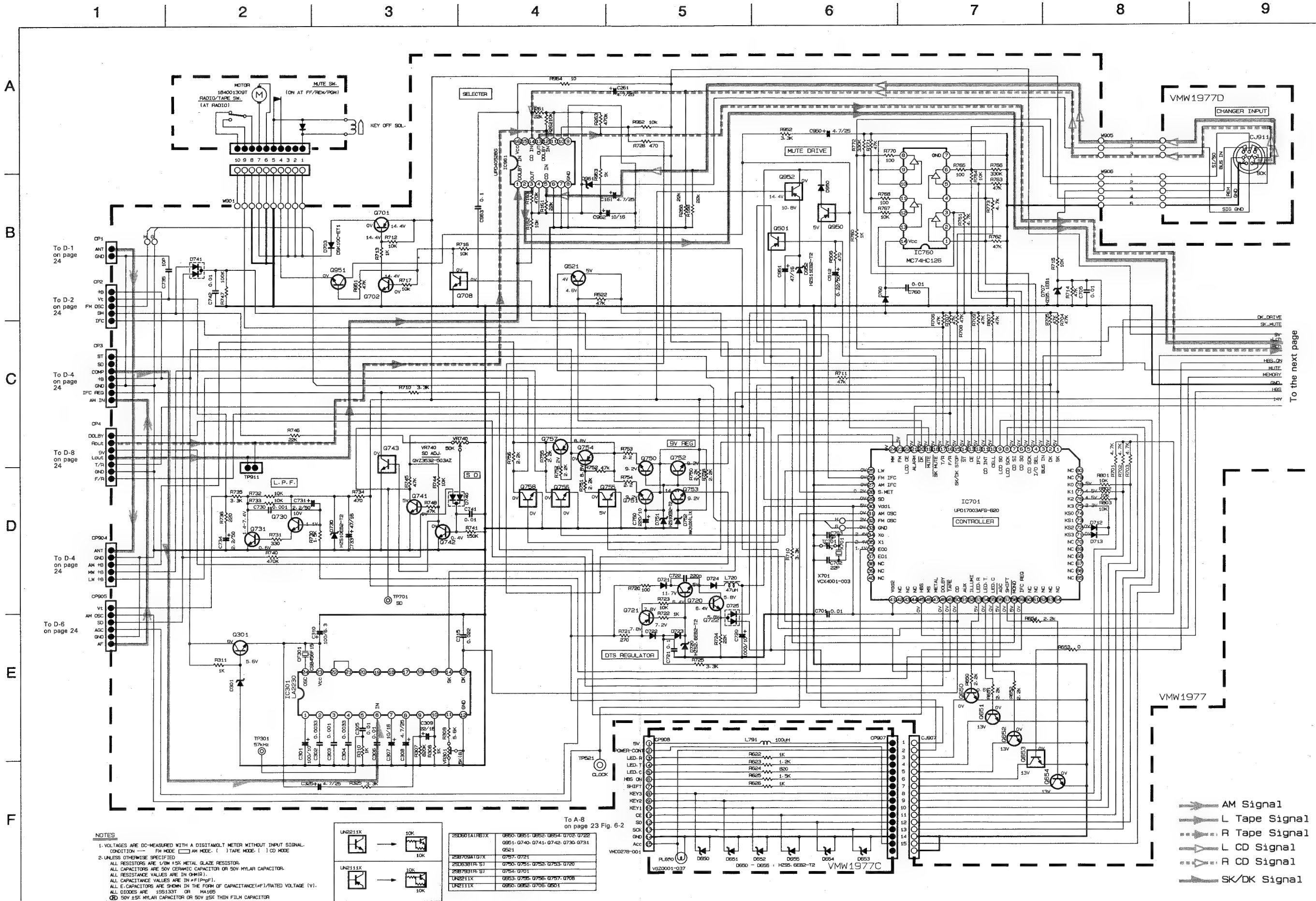


Fig 6 - 7

## ■ Power Amplifier Circuit (G/GEVersion)

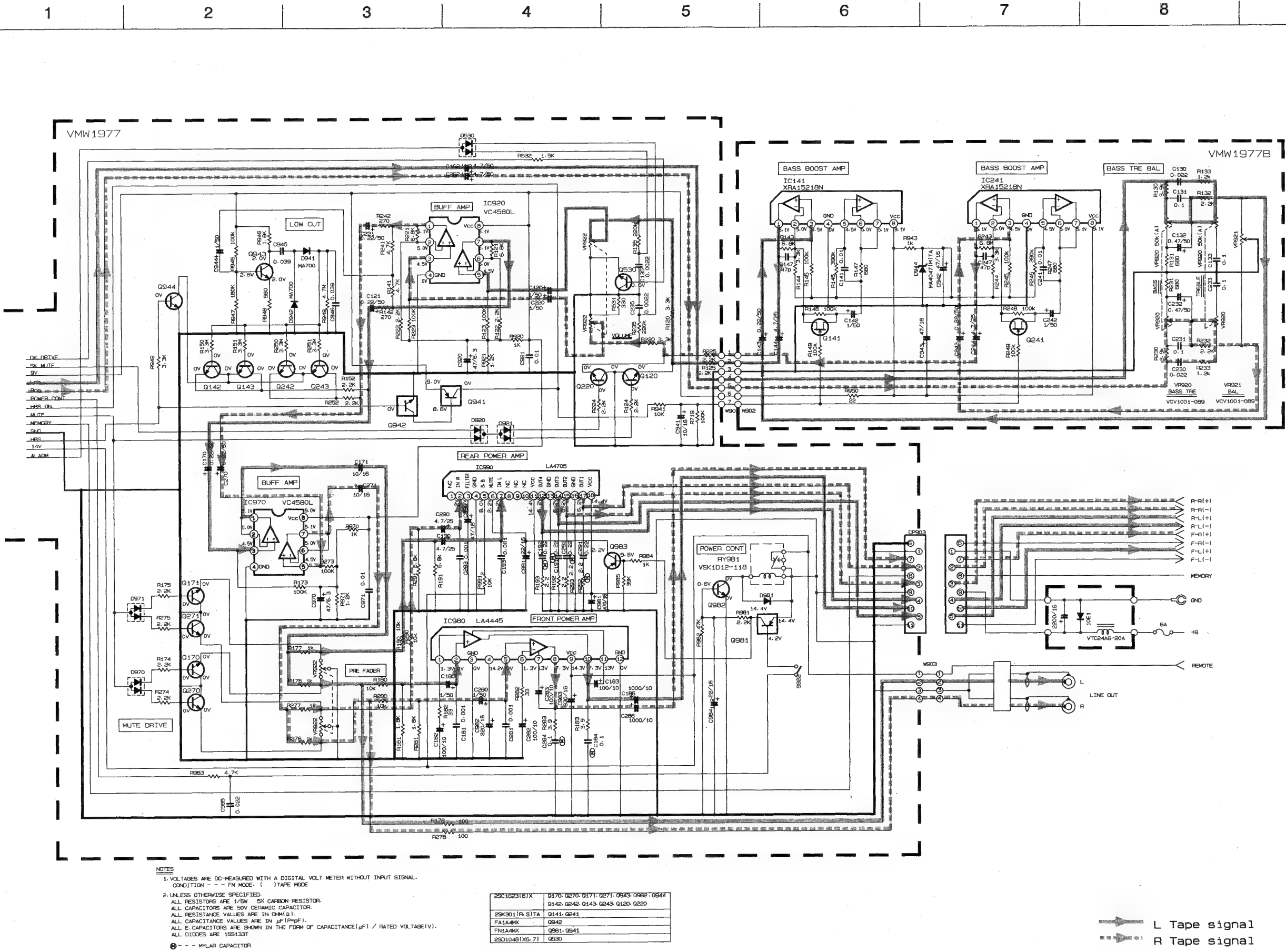


Fig 6 — 8



# 7 Location of P.C. Board Parts and Parts List

■ Main Board

BLOCK No. 0 1

1

2

3

4

5

6

7

8

9

● Main Board

● CD IN Jack Board

● Volume Board

● Connect Board

Fig 7 - 1

## Main board parts list

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
BUS 2	NRSA02J-0R0NY	MG RESISTOR	5X 1/10W	G,GE,B,E,G,I
C 120	GER41HM-105VM	E CAPACITOR	1.0MF 20X 50V	
C 121	GER41HM-224VS	E CAPACITOR	-22MF 20X 50V	
C 130	QCC11EM-223V	C CAPACITOR	-022MF 20X 25V	
C 131	QCC11EM-104V	C CAPACITOR	-10MF 20X 25V	
C 132	QEK41HM-474	E CAPACITOR	4.7MF 20X 50V	
C 133	QCC11EM-104V	C CAPACITOR	-10MF 20X 25V	
C 135	QCY41HK-222	C CAPACITOR	2200PF 10X 50V	G,GE
C 141	QCVB1CM-103Y	C CAPACITOR	-010MF 20X 16V	
C 142	QEK41HM-105	E CAPACITOR	1.0MF 20X 50V	
C 143	QEK41HM-224	E CAPACITOR	22MF 20X 50V	
C 144	QEK41EM-475	E CAPACITOR	4.7MF 20X 25V	
C 147	QCS11HJ-470	C CAPACITOR	47PF 5X 50V	
C 161	GER41EM-475VM	E CAPACITOR	4.7MF 20X 25V	
C 162	QERF1HM-475ZM	E CAPACITOR	4.7MF 20X 50V	
C 170	QER41HM-224VS	E CAPACITOR	-22MF 20X 50V	
C 171	GER41CM-106M	E CAPACITOR	10MF 20X 16V	
C 180	GER41HM-105VM	E CAPACITOR	1.0MF 20X 50V	
C 181	NCB21HK-102AY	C CAPACITOR	1000PF 10X 50V	
C 182	QEKF1AM-107ZN	E CAPACITOR	100MF 20X 10V	
C 183	QETC1AM-107ZN	E CAPACITOR	100MF 20X 10V	
C 184	QFV41HJ-104	TF CAPACITOR	-10MF 5X 50V	
C 186	VCE0040-001	E CAPACITOR		
C 190	QETC1EM-475	E CAPACITOR	4.7MF 20X 25V	
C 191	QFV41HJ-224	TF CAPACITOR	-22MF 5X 50V	
C 192	QFV41HJ-224	TF CAPACITOR	-22MF 5X 50V	
C 193	NCB21HK-102AY	C CAPACITOR	1000PF 10X 50V	
C 220	GER41HM-105VM	E CAPACITOR	1.0MF 20X 50V	
C 221	GER41HM-224VS	E CAPACITOR	-22MF 20X 50V	
C 230	QCC11EM-223V	C CAPACITOR	-022MF 20X 25V	
C 231	QCC11EM-104V	C CAPACITOR	-10MF 20X 25V	
C 232	QEK41HM-474	E CAPACITOR	4.7MF 20X 50V	
C 233	QCC11EM-104V	C CAPACITOR	-10MF 20X 25V	
C 235	NCB21HK-222AY	C CAPACITOR	2200PF 10X 50V	G,GE
C 241	QCVB1CM-103Y	C CAPACITOR	-010MF 20X 16V	
C 242	QEK41HM-105	E CAPACITOR	1.0MF 20X 50V	
C 243	QEK41HM-224	E CAPACITOR	22MF 20X 50V	
C 244	QEK41EM-475	E CAPACITOR	4.7MF 20X 25V	
C 247	QCS11HJ-470	C CAPACITOR	47PF 5X 50V	
C 261	QER41EM-475VM	E CAPACITOR	4.7MF 20X 25V	
C 262	QERF1HM-475ZM	E CAPACITOR	4.7MF 20X 50V	
C 270	GER41HM-224VS	E CAPACITOR	-22MF 20X 50V	
C 271	GER41CM-106M	E CAPACITOR	10MF 20X 16V	
C 280	GER41HM-105VM	E CAPACITOR	1.0MF 20X 50V	
C 281	NCB21HK-102AY	C CAPACITOR	1000PF 10X 50V	
C 282	QEKF1AM-107ZN	E CAPACITOR	100MF 20X 10V	
C 283	QETC1AM-107ZN	E CAPACITOR	100MF 20X 10V	
C 284	QFV41HJ-104	TF CAPACITOR	-10MF 5X 50V	
C 286	QETC1AM-108ZN	E CAPACITOR	1000MF 20X 10V	
C 290	QETC1EM-475	E CAPACITOR	4.7MF 20X 25V	
C 291	QFV41HJ-224	TF CAPACITOR	-22MF 5X 50V	
C 292	QFV41HJ-224	TF CAPACITOR	-22MF 5X 50V	
C 293	QCY41HK-102	C CAPACITOR	1000PF 10X 50V	G,GE
C 301	QEKF1AM-107ZN	E CAPACITOR	100MF 20X 10V	G,GE
C 302	NCB21HK-332AY	C CAPACITOR	3300PF 10X 50V	G,GE

## Main board parts list

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 303	NCB21HK-102AY	C CAPACITOR	1000PF 10X 50V	G,GE
C 304	NCB21HK-332AY	C CAPACITOR	3300PF 10X 50V	G,GE
C 305	NCB21HK-103AY	C CAPACITOR	-010MF 10X 50V	G,GE
C 306	NCB21HK-103AY	C CAPACITOR	-010MF 10X 50V	G,GE
C 307	QER41CM-106M	E CAPACITOR	10MF 20X 16V	G,GE
C 308	QER41EM-475VM	E CAPACITOR	4.7MF 20X 25V	G,GE
C 309	GER41CM-226VM	E CAPACITOR	22MF 20X 16V	G,GE
C 310	QERF0JM-107ZN	E CAPACITOR	100MF 20X 6.3V	G,GE
C 315	NCB21HK-223AY	C CAPACITOR	-022MF 10X 50V	G,GE
C 325	QER41EM-475VM	E CAPACITOR	4.7MF 20X 25V	G,GE
C 312	QER41HM-224VS	E CAPACITOR	-22MF 20X 50V	G,GE
C 701	NCB21HK-103AY	C CAPACITOR	-010MF 10X 50V	
C 702	NCT21CH-220AY	C CAPACITOR	22PF +50:-10X 1	
C 703	NCT21CH-5R0AY	C CAPACITOR	5.0PF +50:-10X	
C 705	NCB21HK-103AY	C CAPACITOR	-010MF 10X 50V	
C 720	VCE0040-001	E CAPACITOR		
C 721	NCB21EK-104AY	C CAPACITOR	-10MF 10X 25V	
C 722	NCS21HJ-221AY	C CAPACITOR	220PF 5X 50V	
C 730	NCB21HK-102AY	C CAPACITOR	1000PF 10X 50V	
C 731	QER41HM-225	E CAPACITOR	2.2MF 20X 50V	
C 733	QER41CM-476M	E CAPACITOR	47MF 20X 16V	
C 734	GER41HM-225	E CAPACITOR	2.2MF 20X 50V	
C 735	QCS11HJ-100	C CAPACITOR	10PF 5X 50V	
C 741	NCB21HK-103AY	C CAPACITOR	-010MF 10X 50V	
C 742	NCB21HK-103AY	C CAPACITOR	-010MF 10X 50V	
C 750	QERF1AM-227ZM	E CAPACITOR	220MF 20X 10V	
C 760	NCB21HK-103AY	C CAPACITOR	-010MF 10X 50V	
C 920	QERF0JM-476ZN	E CAPACITOR	47MF 20X 6.3V	
C 921	NCB21HK-103AY	C CAPACITOR	-010MF 10X 50V	
C 941	QER41CM-106M	E CAPACITOR	10MF 20X 16V	
C 942	QEK41CM-476	E CAPACITOR	47MF 20X 16V	
C 943	QEK41CM-476	E CAPACITOR	47MF 20X 16V	
C 944	QER41HM-105VM	E CAPACITOR	1.0MF 20X 50V	
C 945	NCB21HK-393AY	C CAPACITOR	-039MF 10X 50V	
C 946	NCB21HK-393AY	C CAPACITOR	-039MF 10X 50V	
C 950	QER41EM-475VM	E CAPACITOR	4.7MF 20X 25V	
C 951	GER41CM-476M	E CAPACITOR	47MF 20X 16V	
C 962	QER41CM-106M	E CAPACITOR	10MF 20X 16V	
C 963	NCB21EK-104AY	C CAPACITOR	-10MF 10X 25V	
C 970	QERF0JM-476ZN	E CAPACITOR	47MF 20X 6.3V	
C 971	NCB21HK-103AY	C CAPACITOR	-010MF 10X 50V	
C 981	QETC1CM-477ZN	E CAPACITOR	470MF 20X 16V	
C 982	QETA1CM-227	E CAPACITOR	220MF 20X 16V	
C 983	QETC1CM-337ZN	E CAPACITOR	330MF 20X 16V	
C 984	GER41CM-226VM	E CAPACITOR	22MF 20X 16V	
C 985	NCB21HK-223AY	C CAPACITOR	-022MF 10X 50V	
C 990	QETC1CM-476Z	E CAPACITOR	47MF 20X 16V	
C 991	GER41CM-226VM	E CAPACITOR	22MF 20X 16V	
CF301	CSB456F15	CELA-LOCK		G,GE
CJ907	VMC0232-S16	CONNECTOR		
CJ911	VMJ4035-001	MINI DIN JACK		
CP 1	VMC0135-002	CONNECTOR		
CP 2	VMC0135-005	CONNECTOR		
CP 3	VMC0135-007	CONNECTOR		
CP 4	VMC0135-007	CONNECTOR		

BLOCK NO. 01

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
Q 142	2SC1623(6)	TRANSISTOR		
Q 143	2SC1623(6)	TRANSISTOR		
Q 170	2SC1623(6)	TRANSISTOR		
Q 171	2SC1623(6)	TRANSISTOR		
Q 220	2SC1623(6)	TRANSISTOR		
Q 241	2SK301(P-8)	FET		
Q 242	2SC1623(6)	TRANSISTOR		
Q 243	2SC1623(6)	TRANSISTOR		
Q 270	2SC1623(6)	TRANSISTOR		
Q 271	2SC1623(6)	TRANSISTOR		
Q 301	2SC1623(6)	TRANSISTOR		
Q 501	FN1A4MX	TRANSISTOR		G,GE
Q 521	2SC1623(6)	TRANSISTOR		G,GE
Q 530	2SD1048X7T-HL	TRANSISTOR		G,GE
Q 650	2SC1623(6)	TRANSISTOR		
Q 651	2SC1623(6)	TRANSISTOR		
Q 652	2SC1623(6)	TRANSISTOR		
Q 653	FA1A4M	TRANSISTOR		
Q 654	2SC1623(6)	TRANSISTOR		
Q 701	2SB793	TRANSISTOR		
Q 702	2SC1623(6)	TRANSISTOR		
Q 708	FA1A4M	TRANSISTOR		
Q 720	2SD638(R,S)	TRANSISTOR		
Q 721	2SA812(6)	TRANSISTOR		
Q 722	2SC1623(6)	TRANSISTOR		
Q 730	2SC1623(6)	TRANSISTOR		
Q 731	2SC1623(6)	TRANSISTOR		
Q 741	2SC1623(6)	TRANSISTOR		
Q 742	2SC1623(6)	TRANSISTOR		
Q 743	UN2213	TRANSISTOR		
Q 750	2SD638(R,S)	TRANSISTOR		
Q 751	2SD638(R,S)	TRANSISTOR		
Q 752	2SD638(R,S)	TRANSISTOR		
Q 753	2SD638(R,S)	TRANSISTOR		
Q 754	2SB793	TRANSISTOR		
Q 755	FA1A4M	TRANSISTOR		
Q 756	FA1A4M	TRANSISTOR		
Q 757	2SA812(6)	TRANSISTOR		
Q 758	FA1A4M	TRANSISTOR		
Q 941	FN1A4MX	TRANSISTOR		
Q 942	FA1A4M	TRANSISTOR		
Q 943	2SC1623(6)	TRANSISTOR		
Q 944	2SC1623(6)	TRANSISTOR		
Q 950	FN1A4MX	TRANSISTOR		
Q 951	2SC1623(6)	TRANSISTOR		
Q 952	FN1A4MX	TRANSISTOR		
Q 981	FN1A4MX	TRANSISTOR		
Q 982	2SC1623(6)	TRANSISTOR		
Q 983	2SA812(6)	TRANSISTOR		
R 120	NRS181J-332NY	MG RESISTOR	3.3K 5% 1/8W	
R 121	NRS02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
R 122	NRS02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 123	NRS02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 124	NRS02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 125	NRS181J-222NY	MG RESISTOR	2.2K 5% 1/8W	

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
CP903	VZ0007-030	FEED THRU CAP		
CP904	VNC0135-005	CONNECTOR		
CP905	VNC0135-006	CONNECTOR		
CP907	VNC0232-016	CONNECTOR		
CP908	VNC0278-001	CONNECTOR		
D 301	MA3056	ZENER DIODE		G,GE
D 530	HS2836C	DIODE		G,GE
D 650	HZS5.6EB2	ZENER DIODE		
D 651	HZS5.6EB2	ZENER DIODE		
D 652	HZS5.6EB2	ZENER DIODE		
D 653	HZS5.6EB2	ZENER DIODE		
D 654	HZS5.6EB2	ZENER DIODE		
D 655	HZS5.6EB2	ZENER DIODE		
D 703	DSK10C-E	DIODE		
D 707	HZS5.1EB1	ZENER DIODE		
D 712	MA165	SI DIODE		
D 713	MA165	SI DIODE		
D 720	HZS6.2EB3	Z DIODE		
D 721	MA165	SI DIODE		
D 722	MA165	SI DIODE		
D 723	MA165	SI DIODE		
D 724	HS2836C	DIODE		
D 725	HS2836C	DIODE		
D 730	HZS10EB1	Z DIODE		
D 740	HS2838C	DIODE		
D 741	HS2838C	DIODE		
D 751	HZS10EB2	ZENER DIODE		
D 752	MA3100(M)	Z DIODE		
D 760	MA165	SI DIODE		
D 920	HS2838C	DIODE		
D 921	HS2836C	DIODE		
D 941	MA700	ZENER DIODE		
D 942	MA700	ZENER DIODE		
D 944	MT24.7C	ZENER DIODE		
D 950	MA165	SI DIODE		
D 952	HZS11EB2	SI DIODE		
D 961	HZS5.1EB2	ZENER DIODE		
D 970	HS2836C	DIODE		
D 971	HS2836C	DIODE		
D 981	DSK10C-E	DIODE		
IC141	XRA15218N	IC		
IC241	XRA15218N	IC		
IC301	LA2230	IC		G,GE
IC701	UPD17005GF-664	IC		
IC760	HD74HC126P	IC		
IC920	VC4580D	IC		
IC961	UPD4052BC	IC		
IC970	VC4580D	IC		
IC980	LA4445	IC		
IC990	LA4705	IC		
L 720	VGP025K-470Y	INDUCTOR		
L 791	VGP025K-101	INDUCTOR		
PL650	VGT0001-037	LAMP		
Q 120	2SC1623(6)	TRANSISTOR		
Q 141	2SK301(P-8)	FET		



BLOCK NO. 08111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 250	NRSA02J-335NY	MG RESISTOR	3.3M 5% 1/10W	
R 251	NRSA02J-335NY	MG RESISTOR	3.3M 5% 1/10W	
R 252	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 261	NRSA02J-223NY	MG RESISTOR	2.2K 5% 1/10W	
R 262	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 263	NRSA02J-474NY	MG RESISTOR	470K 5% 1/10W	
R 268	NRSA02J-223NY	MG RESISTOR	2.2K 5% 1/10W	
R 273	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 274	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 275	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 276	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 277	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 278	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 280	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 281	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
R 282	NRSA02J-330NY	MG RESISTOR	33 5% 1/10W	
R 283	NRSA02J-389NY	MG RESISTOR	3.9 5% 1/10W	
R 290	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 291	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
R 292	NRSA02J-282NYM	MG RESISTOR	2.2 5% 1/10W	
R 293	NRSA02J-282NYM	MG RESISTOR	2.2 5% 1/10W	
R 307	NRSA02J-824NY	MG RESISTOR	820K 5% 1/10W	G,GE
R 308	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	G,GE
R 309	NRSA02J-562NY	MG RESISTOR	5.6K 5% 1/10W	G,GE
R 310	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	G,GE
R 311	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	G,GE
R 325	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	G,GE
R 506	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	G,GE
R 522	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	G,GE
R 531	QRD161J-331	CARBON RESISTOR	330 5% 1/6W	G,GE
R 532	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	G,GE
R 571	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	G,GE
R 622	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	G,GE
R 623	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 624	QRD161J-821	CARBON RESISTOR	820 5% 1/6W	
R 625	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 626	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 650	NRS181J-222NY	MG RESISTOR	2.2K 5% 1/8W	
R 651	NRS181J-222NY	MG RESISTOR	2.2K 5% 1/8W	
R 652	NRS181J-222NY	MG RESISTOR	2.2K 5% 1/8W	
R 653	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
R 654	NRS181J-222NY	MG RESISTOR	2.2K 5% 1/8W	
R 701	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 702	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 703	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 704	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 705	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 706	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 707	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 708	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 709	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 710	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 711	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 712	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 713	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	

BLOCK NO. 08111111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 130	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 131	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 132	QRD161J-222	CARBON RESISTOR	2.2K 5% 1/6W	
R 133	QRD161J-122	C RESISTOR	1.2K 5% 1/6W	
R 135	NRSA02J-224NY	MG RESISTOR	220K 5% 1/10W	G,GE
R 141	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 142	NRSA02J-271NY	MG RESISTOR	270 5% 1/10W	
R 143	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 144	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 145	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 146	QRD161J-394	CARBON RESISTOR	390K 5% 1/6W	
R 147	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 148	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 149	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 150	NRSA02J-335NY	MG RESISTOR	3.3M 5% 1/10W	
R 151	NRSA02J-335NY	MG RESISTOR	3.3M 5% 1/10W	
R 152	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 161	NRSA02J-223NY	MG RESISTOR	2.2K 5% 1/10W	
R 162	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 163	NRSA02J-474NY	MG RESISTOR	470K 5% 1/10W	
R 168	NRSA02J-223NY	MG RESISTOR	2.2K 5% 1/10W	
R 173	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 174	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 175	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 176	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 177	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 178	QRD161J-101	CARBON RESISTOR	100 5% 1/6W	
R 180	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 181	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
R 182	NRSA02J-330NY	MG RESISTOR	33 5% 1/10W	
R 183	NRSA02J-389NY	MG RESISTOR	3.9 5% 1/10W	
R 190	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 191	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
R 192	NRSA02J-282NYM	MG RESISTOR	2.2 5% 1/10W	
R 193	NRSA02J-282NYM	MG RESISTOR	2.2 5% 1/10W	
R 220	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
R 221	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
R 222	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 223	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 224	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 225	NRS181J-222NY	MG RESISTOR	2.2K 5% 1/8W	
R 230	QRD161J-392	CARBON RESISTOR	3.9K 5% 1/6W	
R 231	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 232	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 233	QRD161J-122	CARBON RESISTOR	1.2K 5% 1/6W	
R 235	NRSA02J-224NY	MG RESISTOR	220K 5% 1/10W	G,GE
R 241	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 242	NRSA02J-271NY	MG RESISTOR	270 5% 1/10W	
R 243	QRD161J-682	CARBON RESISTOR	6.8K 5% 1/6W	
R 244	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 245	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 246	QRD161J-394	CARBON RESISTOR	390K 5% 1/6W	
R 247	QRD161J-681	CARBON RESISTOR	680 5% 1/6W	
R 248	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	
R 249	QRD161J-104	CARBON RESISTOR	100K 5% 1/6W	

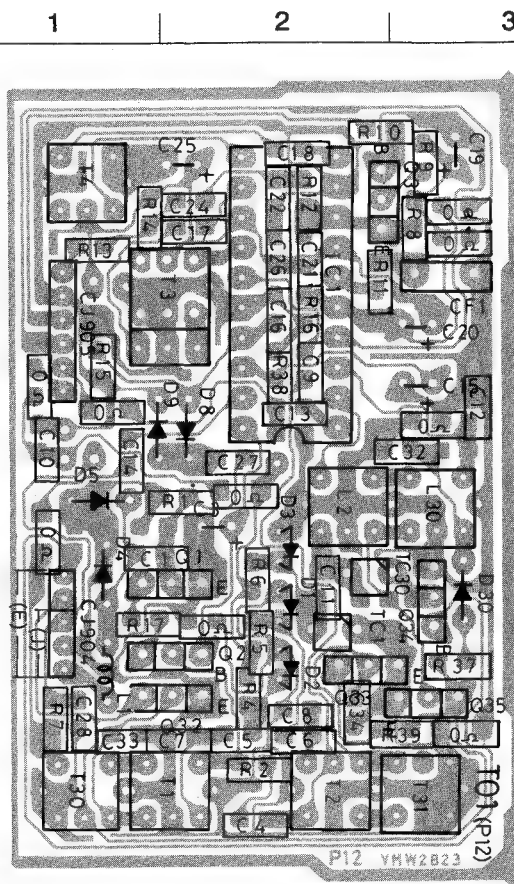
BLOCK NO. 01

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 942	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
R 943	QRD161J-102	CARBON RESISTOR	1.0K 5% 1/6W	
R 945	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 946	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
R 947	NRSA02J-184NY	MG RESISTOR	180K 5% 1/10W	
R 948	NRSA02J-561NY	MG RESISTOR	560 5% 1/10W	
R 949	NRSA02J-475NY	MG RESISTOR	4.7M 5% 1/10W	
R 950	QRD161J-220	CARBON RESISTOR	22 5% 1/6W	
R 951	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 952	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
R 962	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 963	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 964	NRSA02J-100NY	MG RESISTOR	10 5% 1/10W	
R 970	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 971	NRSA02J-122NY	MG RESISTOR	1.2K 5% 1/10W	
R 981	NRS181J-222NY	MG RESISTOR	2.2K 5% 1/8W	
R 982	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 983	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 984	NRS181J-102NY	MG RESISTOR	1.0K 5% 1/8W	
R 985	NRSA02J-393NY	MG RESISTOR	39K 5% 1/10W	
R 991	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
RY981	VSK1D12-118	RELAY		
TC701	QAT3722-3002M	T CAPACITOR		
TP911	VMC0075-002M	CONNECTOR		
VR301	QVPE612-5022M	VR		G-GE
VR740	QVPA601-503A	V RESISTOR		
VR920	VCV1001-152	V RESISTOR		
VR921	VCV1001-153	V RESISTOR		
VR922	VCV1001-154	V RESISTOR		
W 903	VMP3249-102	PIN CORD ASS'Y		
X 701	VCX4001-003	CRYSTAL		
3US 1	NRS181J-OR0NY	MG RESISTOR	5% 1/8W	G,GE,B,E,GI

BLOCK NO. 02

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 714	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 715	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 716	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 717	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 719	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 720	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
R 721	NRSA02J-271NY	MG RESISTOR	270 5% 1/10W	
R 722	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 723	QRD161J-103	CARBON RESISTOR	10K 5% 1/6W	
R 724	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
R 725	QRD161J-332	CARBON RESISTOR	3.3K 5% 1/6W	
R 728	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
R 730	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
R 731	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
R 732	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 733	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 734	NRSA02J-471NY	MG RESISTOR	470 5% 1/10W	
R 735	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
R 736	NRSA02J-221NY	MG RESISTOR	220 5% 1/10W	
R 740	NRSA02J-474NY	MG RESISTOR	470K 5% 1/10W	
R 741	NRSA02J-154NY	MG RESISTOR	150K 5% 1/10W	
R 744	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 745	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 746	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
R 747	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 748	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 750	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 751	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 752	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 753	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R 754	QRD161J-2R2	CARBON RESISTOR	2.2 5% 1/6W	
R 755	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 756	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 757	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 758	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 760	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 761	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 762	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 763	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 764	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 765	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
R 766	NRSA02J-334NY	MG RESISTOR	330K 5% 1/10W	
R 767	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 768	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
R 770	NRSA02J-101NY	MG RESISTOR	100 5% 1/10W	
R 771	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 772	NRSA02J-334NY	MG RESISTOR	330K 5% 1/10W	
R 773	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
R 801	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 802	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 803	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 807	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 920	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 921	NRSA02J-122NY	MG RESISTOR	1.2K 5% 1/10W	
R 941	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	

## AM Board and Parts List



**Fig. 7-2**

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 5	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 6	NRSA02J-104NY	MG RESISTOR	100K 5% 1/10W	
R 7	NRSA02J-330NY	MG RESISTOR	33 5% 1/10W	
R 8	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
R 9	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 10	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 11	NRSA02J-820NY	MG RESISTOR	82 5% 1/10W	
R 12	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
R 13	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
R 14	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 15	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 16	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
R 17	NRSA02J-100NY	MG RESISTOR	10 5% 1/10W	
R 37	NRSA02J-332NY	MG RESISTOR	3.3K 5% 1/10W	
R 38	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
R 39	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
T 1	VQZ0040-001	AM RF		
T 2	VQZ0040-101	AM RF		
T 3	VQT7A21-105	IFT		
T 4	VQT7A11-209	IFT		
T 30	VQZ0056-001	LW RF COIL		
T 31	VQZ0056-001	LW RF COIL		
TC 1	GAT3720-200M	T.CAPACITOR		
TC 30	GAT3720-600M	T CAPACITOR		

## ● AM Board Parts List

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
B	150	V44611-003	PIN		
C	1	NCS21HJ-821AY	C CAPACITOR	820PF 5% 50V	
C	3	GEK41CM-226	E CAPACITOR	22MF 20% 16V	
C	4	NCB21EK-103AY	C CAPACITOR	.010MF 10% 25V	
C	5	NCB21EK-223AY	C CAPACITOR	.022MF 10% 25V	
C	6	NCB21EK-223AY	C CAPACITOR	.022MF 10% 25V	
C	7	NCS21HD-100AY	C CAPACITOR	10PF 50V	
C	8	NCS21HD-100AY	C CAPACITOR	10PF 50V	
C	9	NCB21EK-223AY	C CAPACITOR	.022MF 10% 25V	
C	10	NCB21EK-103AY	C CAPACITOR	.010MF 10% 25V	
C	11	NCT21CH-431AY	C CAPACITOR	430PF +50%-10%	
C	12	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
C	13	NCB21EK-103AY	C CAPACITOR	.010MF 10% 25V	
C	14	NCB21EK-223AY	C CAPACITOR	.022MF 10% 25V	
C	15	GEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C	16	NCB21EK-103AY	C CAPACITOR	.010MF 10% 25V	
C	17	NCB21EK-103AY	C CAPACITOR	.010MF 10% 25V	
C	18	NCB21EK-103AY	C CAPACITOR	.010MF 10% 25V	
C	19	GER41CM-226VM	E CAPACITOR	22MF 20% 16V	
C	20	GEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C	21	NCB21EK-103AY	C CAPACITOR	.010MF 10% 25V	
C	22	NCB21EK-103AY	C CAPACITOR	.010MF 10% 25V	
C	24	NCB21EK-683AY	C CAPACITOR	.068MF 10% 25V	
C	25	GEK41CM-476	E CAPACITOR	47MF 20% 16V	
C	26	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
C	27	NCB21EK-103AY	C CAPACITOR	.010MF 10% 25V	
C	28	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
C	32	NCT21CH-271AY	C CAPACITOR	270PF +50%-10%	
C	33	NCS21HJ-120AY	C CAPACITOR	12PF 5% 50V	
C	34	NCS21HJ-120AY	C CAPACITOR	12PF 5% 50V	
CF	1	BFU450C4N	CERAMIC FILTER		
CJ	904	VNC0136-005	CONNECTOR		
CJ	905	VNC0136-006	CONNECTOR		
D	1	SVC321SP	VARI.CAP		
D	2	SVC321SP	VARI.CAP		
D	3	SVC321SP	VARI.CAP		
D	4	MA165	SI DIODE		
D	5	MA165	SI DIODE		
D	8	1SV121	PIN DIODE		
D	9	1SV121	PIN DIODE		
D	30	MA165	SI DIODE		
IC	1	LA1135	IC		
L	1	VGP025K-470Y	INDUCTOR		
L	2	VGM7U01-501	OSC COIL(MW)		
L	30	VGL7U01-501	OSC COIL(LW)		
Q	1	2SK519(EL,FL)	FET		
Q	2	2SC1740S(R,S)	TRANSISTOR		
Q	3	2SA1175(HFE)	TRANSISTOR		
Q	32	RN1202	TRANSISTOR		
Q	33	2SC2785(HFE)	TRANSISTOR		
Q	34	RN1202	TRANSISTOR		
Q	35	RN1202	TRANSISTOR		
R	1	NKSA02J-104NY	NG RESISTOR	100K 5% 1/10W	
R	2	NRSA02J-102NY	NG RESISTOR	1.0K 5% 1/10W	
R	4	NRSA02J-104NY	NG RESISTOR	100K 5% 1/10W	

### ■ Sub Board

1

2

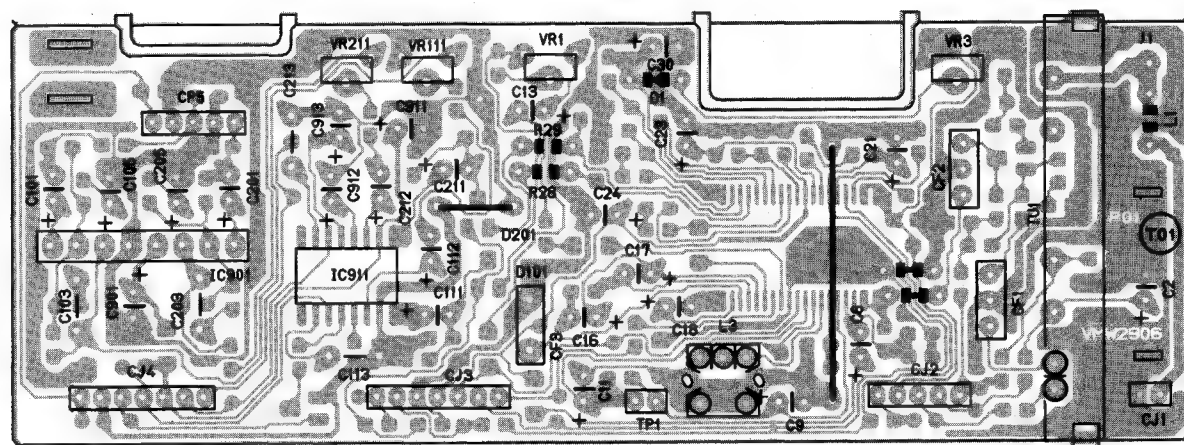
3

4

A

**B**

C



**Fig. 7-3**

## ● Sub Board Parts List

BLOCK NO. 03

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
BUS 1	NRS181J-ORONY	MG RESISTOR	5% 1/8W	
BUS 2	NRS402J-ORONY	MG RESISTOR	5% 1/10W	
C 1	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
C 2	QEK41HM-104	E CAPACITOR	.10MF 20% 50V	
C 4	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
C 5	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
C 6	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
C 7	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
C 8	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 9	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 10	NCB21HK-102AY	C CAPACITOR	1000PF 10% 50V	
C 11	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
C 12	NCT21CH-120AY	C CAPACITOR	12PF +50%-10% 1	
C 13	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
C 14	NCB21HK-222AY	C CAPACITOR	2200PF 10% 50V	
C 15	QCY81HK-223Y	C CAPACITOR	.022MF 10% 50V	
C 16	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 17	QEK41HM-224	E CAPACITOR	.22MF 20% 50V	
C 18	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 19	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
C 20	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
C 21	QEK41HM-224	E CAPACITOR	.22MF 20% 50V	
C 22	NCB21HK-103AY	C CAPACITOR	.010MF 10% 50V	
C 23	QEK41CM-226	E CAPACITOR	22MF 20% 16V	
C 24	QEK41CM-476	E CAPACITOR	47MF 20% 16V	
C 25	NCS21HJ-681AY	C CAPACITOR	680PF 5% 50V	
C 26	NCB21HK-682AY	C CAPACITOR	6800PF 10% 50V	
C 27	NCB21HK-472AY	C CAPACITOR	4700PF 10% 50V	
C 28	NCB21HK-332AY	C CAPACITOR	3300PF 10% 50V	
C 29	NCB21HK-223AY	C CAPACITOR	.022MF 10% 50V	
C 30	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 32	NCB21EK-153AY	C CAPACITOR	.015MF 10% 25V	
C 33	NCB21EK-153AY	C CAPACITOR	.015MF 10% 25V	
C 34	NCB21EK-183AY	C CAPACITOR	.018MF 10% 25V	
C 35	NCB21EK-473AY	C CAPACITOR	.047MF 10% 25V	
C 36	QCS11HJ-100	C CAPACITOR	10PF 5% 50V	
C 101	QEK41HM-474	E CAPACITOR	.47MF 20% 50V	
C 102	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
C 103	QFV71HJ-103	FILM CAPACITOR	.010MF 5% 50V	
C 104	NCB21HK-681AY	C CAPACITOR	680PF 10% 50V	
C 105	QEK41AM-336ZN	E CAPACITOR	33MF 20% 10V	
C 111	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 112	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 113	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V	
C 114	NCB21HK-182AY	C CAPACITOR	1800PF 10% 50V	
C 201	QEK41HM-474	E CAPACITOR	.47MF 20% 50V	
C 202	NCS21HJ-101AY	C CAPACITOR	100PF 5% 50V	
C 203	QFV71HJ-103	FILM CAPACITOR	.010MF 5% 50V	
C 204	NCB21HK-681AY	C CAPACITOR	680PF 10% 50V	
C 205	QEK41AM-336ZN	E CAPACITOR	33MF 20% 10V	
C 211	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 212	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
C 213	QFV41HJ-224	TF CAPACITOR	.22MF 5% 50V	
C 214	NCB21HK-182AY	C CAPACITOR	1800PF 10% 50V	
C 901	QEK41CM-107ZN	E CAPACITOR	100MF 20% 16V	

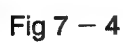


BLOCK NO. 03

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	R 101	NRSA02J-334NY	MG RESISTOR	330K 5% 1/10W	
	R 102	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 103	NRSA02J-271NY	MG RESISTOR	270 5% 1/10W	
	R 111	NRSA02J-822NY	MG RESISTOR	8.2K 5% 1/10W	
	R 201	NRSA02J-334NY	MG RESISTOR	330K 5% 1/10W	
	R 202	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 203	NRSA02J-271NY	MG RESISTOR	270 5% 1/10W	
	R 211	NRSA02J-822NY	MG RESISTOR	8.2K 5% 1/10W	
	R 901	NRS181J-101NY	MG RESISTOR	100 5% 1/8W	
	R 911	NRSA02J-183NY	MG RESISTOR	18K 5% 1/10W	
	R 912	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	R 913	NRSA02J-223NY	MG RESISTOR	22K 5% 1/10W	
	TP 1	VMC0075-002N	CONNECTOR		
	TU 1	VAF2S07-301	FM FRONT END		GI, G, GE
	TU 1	VAF2S07-401	FM FRONT END		B, E
	VR 1	QVPA603-333A	SEMI-V. RESISTOR		
	VR 3	QVPA603-223A	SEMI-V. RESISTOR		
	VR111	QVPA603-223A	SEMI-V. RESISTOR		
	VR211	QVPA603-223A	SEMI-V. RESISTOR		

BLOCK NO. 03

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
	C 902	NB211K-103AY	C CAPACITOR	.010MF 10% 50V	
	C 911	QEK41CM-476	E CAPACITOR	47MF 20% 16V	
	C 912	QEK41HM-105	E CAPACITOR	1.0MF 20% 50V	
	C 913	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	CF 1	VCF2S38-102	C FILTER		
	CF 2	VCF2M38-104	C FILTER		
	CF 3	CSB456F23	CERA ROCK		
	CJ 1	VMC0136-002	CONNECTOR		
	CJ 2	VMC0136-005	CONNECTOR		
	CJ 3	VMC0136-007	CONNECTOR		
	CJ 4	VMC0136-007	CONNECTOR		
	CP 5	TXLL-005-M	CONNECTOR		
	D 1	MA165	SI DIODE		
	D 101	HSM2838C	DIODE		
	D 201	HSM2838C	DIODE		
	IC 1	LA1862M	IC		
	IC901	UPC1228HA	IC		
	IC911	HA12135AF-EL	IC		
	J 1	VNZ0015-014	POST PIN		
	L 1	VGP025K-4R7Y	INDUCTOR		
	L 3	VQ17F07-504	1FT		
	Q 1	2SC2814 (F&F5)HL	TRANSISTOR		
	Q 911	UN2213	TRANSISTOR		
	R 1	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
	R 2	NRSA02J-151NY	MG RESISTOR	150 5% 1/10W	
	R 3	NRSA02J-391NY	MG RESISTOR	390 5% 1/10W	
	R 4	NRSA02J-203NY	MG RESISTOR	20K 5% 1/10W	
	R 5	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
	R 6	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 7	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
	R 8	NRSA02J-221NY	MG RESISTOR	220 5% 1/10W	
	R 9	NRSA02J-331NY	MG RESISTOR	330 5% 1/10W	
	R 10	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
	R 11	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 12	NRSA02J-123NY	MG RESISTOR	12K 5% 1/10W	
	R 13	NRSA02J-582NY	MG RESISTOR	5.6K 5% 1/10W	
	R 14	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	
	R 15	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
	R 16	NRSA02J-562NY	MG RESISTOR	5.6K 5% 1/10W	
	R 17	NRSA02J-683NY	MG RESISTOR	68K 5% 1/10W	
	R 18	NRSA02J-472NY	MG RESISTOR	4.7K 5% 1/10W	
	R 19	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
	R 20	NRSA02J-682NY	MG RESISTOR	6.8K 5% 1/10W	
	R 21	NRSA02J-752NY	MG RESISTOR	7.5K 5% 1/10W	
	R 23	NRSA02J-333NY	MG RESISTOR	33K 5% 1/10W	
	R 24	NRSA02J-683NY	MG RESISTOR	68K 5% 1/10W	
	R 25	NRSA02J-273NY	MG RESISTOR	27K 5% 1/10W	
	R 26	NRSA02J-562NY	MG RESISTOR	5.6K 5% 1/10W	
	R 27	NRSA02J-150NY	MG RESISTOR	15 5% 1/10W	
	R 28	QRD161J-273	CARBON RESISTOR	27K 5% 1/6W	B, E, GI
	R 28	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	G, GE
	R 29	QRD161J-223	CARBON RESISTOR	22K 5% 1/6W	
	R 30	NRSA02J-333NY	M.G. RESISTOR	33K 5% 1/10W	B, E, GI
	R 30	NRSA02J-153NY	MG RESISTOR	15K 5% 1/10W	G, GE
	R 31	NRSA02J-470NY	MG RESISTOR	47 5% 1/10W	



## ● Key/Display Board Parts List

BLOCK NO. 04

BLOCK NO. 04

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 791	NC521HJ-681AY	C CAPACITOR	680PF 5% 50V	
C 792	NCB21EK-223AY	C CAPACITOR	.022MF 10% 25V	
C 793	NEF20JM-475RY	TS E CAPACITOR	4.7MF 20% 6.3V	
CP930	VMC0259-001	CONNECTOR		
D 601	GL-3EG8	LED	MONO	
D 602	GL-3EG8	LED	P-SCAN	
D 603	GL-3EG8	LED	DOLBY	
D 604	GL-3EG8	LED	MAG UP	
D 605	GL-3EG8	LED	MAG DOWN	
D 606	GL-3EG8	LED	RANDOM	
D 607	GL-3HD8	LED	HBS	
D 608	GL-3HD8	LED	SHIFT	
D 609	GL-3HY8	LED	1	
D 610	GL-3HY8	LED	2	
D 611	GL-3HY8	LED	3	
D 612	GL-3HY8	LED	4	
D 613	GL-3HY8	LED	5	
D 614	GL-3HY8	LED	6	
D 615	GL-3HY8	LED	FUNC	
D 616	GL-3HY8	LED	BAND	
D 791	HSN2838C	DIODE		
D 792	HSN2836C	DIODE		
D 793	HSN2836C	DIODE		
D 794	HSN2838C	DIODE		
D 795	HSN2838C	DIODE		
IC791	LC7582A	IC		
LCD 1	VGL1133-001	LCD		
PL602	VGZ0001-037	LAMP		
PL603	VGZ0001-037	LAMP		
PL605	VGZ0001-052	LAMP		
R 601	NRSA02J-271NY	MG RESISTOR	270 5% 1/10W	
R 602	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
R 603	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 604	NRSA02J-152NY	MG RESISTOR	1.5K 5% 1/10W	
R 605	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 606	NRSA02J-821NY	MG RESISTOR	820 5% 1/10W	
R 608	NRSA02J-271NY	MG RESISTOR	270 5% 1/10W	
R 609	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
R 610	NRSA02J-392NY	MG RESISTOR	3.9K 5% 1/10W	
R 610	NRSA02J-222NY	MG RESISTOR	2.2K 5% 1/10W	
R 611	NRSA02J-102NY	MG RESISTOR	1.0K 5% 1/10W	
R 611	NRSA02J-272NY	MG RESISTOR	2.7K 5% 1/10W	
R 612	NRSA02J-821NY	MG RESISTOR	820 5% 1/10W	
R 615	NRSA02J-271NY	MG RESISTOR	270 5% 1/10W	
R 627	NR3181J-152NY	MG RESISTOR	1.5K 5% 1/8W	
R 628	NR3181J-152NY	MG RESISTOR	1.5K 5% 1/8W	
R 629	NRSA02J-182NY	MG RESISTOR	1.8K 5% 1/10W	
R 791	NRSA02J-473NY	MG RESISTOR	47K 5% 1/10W	
R 792	NRSA02J-154NY	MG RESISTOR	150K 5% 1/10W	
R 793	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 794	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
R 795	NRSA02J-103NY	MG RESISTOR	10K 5% 1/10W	
S 601	QSQ1B11-V01Z	TACT SWITCH	2/MONO	
S 602	QSQ1B11-V01Z	TACT SWITCH	BAND/CLOCK	
S 603	QSQ1B11-V01Z	TACT SWITCH	3/DOLBY	

## ● Key/Display Board Parts List

BLOCK NO. 04

A REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
S 604	QSQ1B11-V01Z	TACT SWITCH	4/RANDOM	
S 605	QSQ1B11-V01Z	TACT SWITCH	5/MAGAGINE	
S 606	QSQ1B11-V01Z	TACT SWITCH	6/MAGAGINE+	
S 607	QSQ1B11-V01Z	TACT SWITCH	1/P-SCAN	
S 608	QSQ1B11-V01Z	TACT SWITCH	FUNCTION	
S 609	QSQ1B11-V01Z	TACT SWITCH	HBS/SK-DK	
S 610	QSQ1B11-V01Z	TACT SWITCH	SHIFT	
S 611	QSQ1B11-V01Z	TACT SWITCH	UP/SKIP+	
S 612	QSQ1B11-V01Z	TACT SWITCH	DOWN/SKIP-	

# **8 Exploded View of Encosre Component parts**

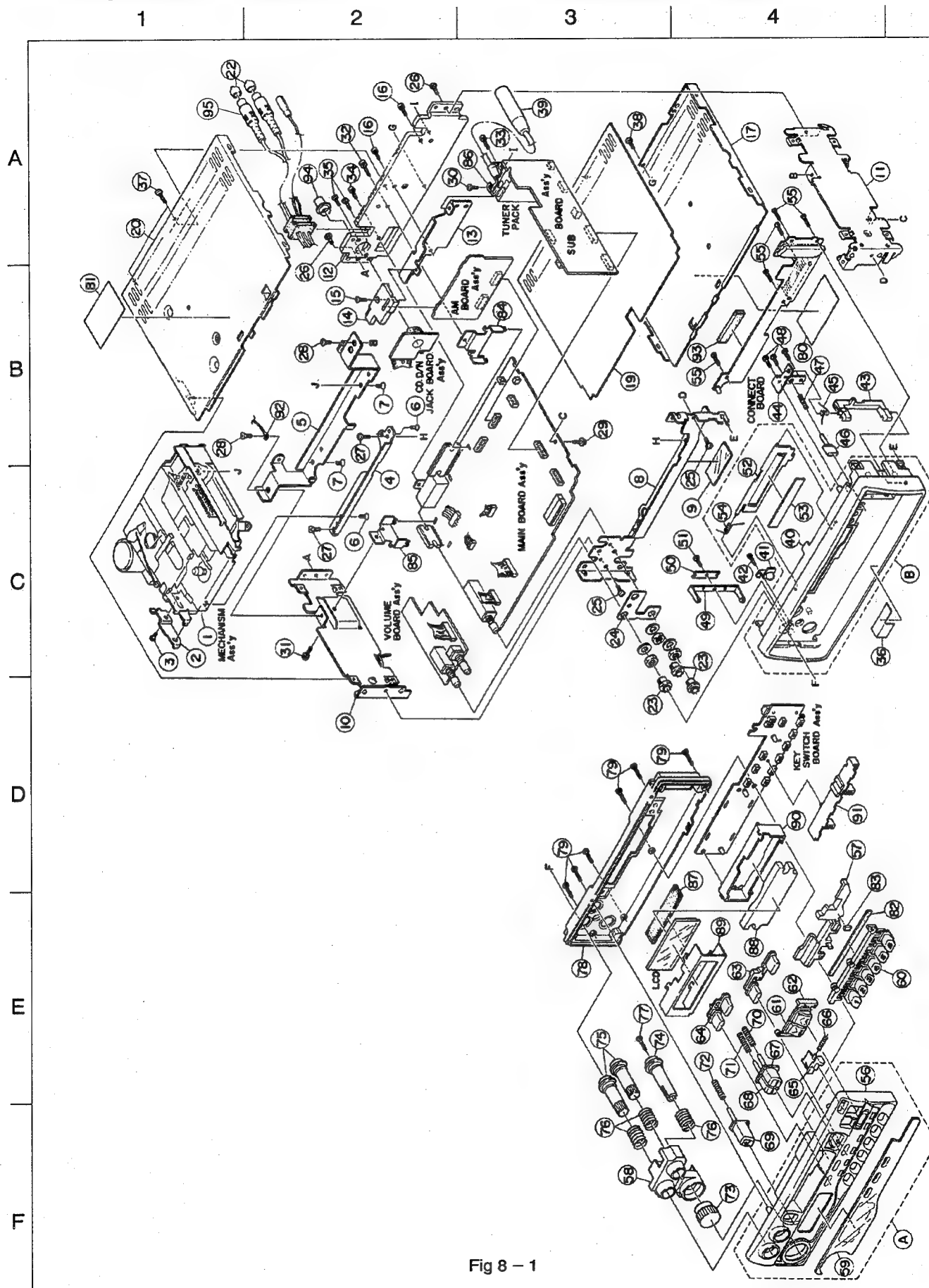


Fig 8 - 1

## ● Encloser Component Parts List

BLOCK NO. M1MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	ZCKSRT70G-NPA	NOSE PIACE ASSY		1	G,GE	
B	ZCKSRT70K-NPA	NOSE PIECE ASSY		1	B,E,GI	
1	ZCKSRT70K-FB	FRONT PANEL ASSY		1		
2	VKL7226-003	MECHANISM ASS'Y	2CH HEAD MECHA	1		
3	SPSK2625Z	EJECT LEVER		1		
4	VKM3645-001	MINI SCREW	FOR EJECT LEVER	1		
5	VKM3594-001	MECHA BRACKET F		1		
6	SSSP3005Z	MECHA BRACKET R		1		
7	SSSP3005Z	SCREW	MECHA BRACKET F	2		
8	SSSP3005Z	SCREW	MECHA BRACKET R	2		
9	VKM3642-001	FRONT BRACKET		1		
10	VYSS1R4-040	SPACER	F.BRACEK BOTTOM	1		
11	VKM3643-002	SIDE BRACKET L		1		
12	VKM3644-001	SIDE BRACKET R		1		
13	VJC3247-008	REAR PANEL		1		
14	VKL7291-001	BRACKET	REAR PANEL	1		
15	VKS3531-001	TUNER HOLDER	AM TUNER BOARD	1		
16	SSST2606Z	SCREW	TUNER HOLDER	1		
17	LPSP2606Z	SCREW	BRACKET	2		
18	VKM3352-004	BOTTOM COVER		1		
19	VMA3209-002	INSULATOR		1		
20	VKM3398-005	TOP COVER		1		
21	VYTA500-001	PIN CAP		2		
22	VKS5439-001	SHAFT KNOB		3		
23	VKL7274-002	VOLUME HOLDER		1		
24	SDST2606Z	SCREW	FRONT+SIDE(L,R)	2		
25	SDST2606Z	SCREW	SIDE L,R+REAR	2		
26	SDST2606Z	SCREW	FRONT BRACKET	2		
27	SSST2606Z	SCREW	M.BKT,SIDE	2		
28	SDST2606Z	SCREW	MAIN BARD+SIDE	1		
29	SDST2606Z	SCREW	TUNER PACK	1		
30	LPSP3005Z	SCREW	SIDE IC BRACKET	1		
31	LPSP2606Z	SCREW	R.PANEL+IC BKT	1		
32	LPSP2606Z	SCREW	ANTENA CORD	1		
33	LPSP2606Z	SCREW	11PIN CONNECTOR	1		
34	SDSF2608Z	SCREW	REAR+MIN DIN JA	2		
35	VNF3428-001	POP		1		
36	LPSP2606Z	SCREW	TOP COVER	2		
37	LPSP2606Z	SCREW	BOTTOM COVER	1		
38	VMP0029-027	ANT CORD		1		
39	VJC2489-002	FRONT CHASSIS		1		
40	VJK4399-002	LENS		1		
41	SPSN1755N	MINI SCREW	F.CHASSIS+LENS	1		
42	VKS5438-001	LOCK LEVER		1		
43	VKL7267-001	LEVER BRACKET		1		
44	VKM5093-001	TORSION SPRING	FOR LOCK LEVER	1		
45	VXP5139-001	RLS KNOB		1		
46	VKW3001-298	COMP.SPRING	RLS BUTTON	1		
47	SDSF2006Z	SCREW	F.CHAASIS+L.BKT	3		
48	VKY4665-00C	LOCK SP ASS'Y		1		
49	VKL7647-001	PLATE		1		
50	SDSF2008M	SCREW	SPRING PLATE	1		
51	VJC4145-002SS	CASSETTE LID		1		
52	VJC4146-021	LID PLATE		1		
53	VKW4947-002	DOOR SPRING		1		

BLOCK NO. M1MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
55	SPSN1755N	MINI SCREW	F.CHASSIS+C.PWB	5		
56	VJG1221-002	FRONT PANEL		1		
57	ZCKSRT70K-LENS	LIGHT LENS ASSY	SERVICE PARTS	1		
58	VJK2182-001	KNOB LENS		1		
59	VJK2183-001	FINDER		1	B,E,GI	
60	VJK2183-002	FINDER		1	G,GE	
61	VXP2066-002	PRESET BUTTON		1		
62	VXP3571-002	DOWN BUTTON		1		
63	VXP3572-002	UP BUTTON		1		
64	VXP3577-003	PUSH BUTTON		1		
65	VXP3578-001	PUSH BUTTON		1		
66	VXP3573-003	DETACH BUTTON(F		1		
67	VKW3001-302	COMP. SPRING		1		
68	VXP3574-001	FF BUTTON		1		
69	VXP3575-001	REW BUTTON		1		
70	VXP3576-001	EJECT BUTTON		1		
71	VKW3001-304	COMP. SPRING	FOR FF BUTTON	1		
72	VKW3001-304	COMP. SPRING	FOR REW BUTTON	1		
73	VXL4428-001	COMP. SPRING	FOR EJECT BUTTO	1		
74	VXL4428-001	VOL KNOB		1		
75	VKS5445-001	VOL KNOB(R)		1		
76	VXL4429-001	TONE KNOB		2		
77	VKW5071-001	COMP. SPRING	FOR TONE KNOB	3		
78	SPSN1755N	MINI SCREW	VOL KNOB(F)+(R)	1		
79	VJG1222-002	REAR COVER		1		
80	SPSN1755N	MINI SCREW	FRONT+REAR	7		
81	VYN3430-003SA	NAME PLATE		1	GI	
82	VYN3430-001SA	NAME PLATE		1	B,E	
83	VYN3430-002SA	NAME PLATE		1	G,GE	
84	VND4391-001	CAUTION LABEL		1		
85	VYSH102-084	SPACER	FOR PRESET BUTT	1		
86	VYSH102-085	SPACER	FOR PRESET BUTT	1		
87	VKL7275-002	IC BRACKET		1		
88	VKL6996-001	IC BRACKET		1		
89	VMA4397-003	SHEILD PLATE		1		
90	VMZ0121-001	INTER CONNECTOR		1		
91	VJK3612-001	LCD LENS		1		
92	VKM3646-001	LCD CASE		1		
93	VKS3625-001	LENS CASE		1		
94	VKS3622-002	LED HOLDER		1		
95	VWE240-07NTA1	LUG WIRE		1		
96	VYSR102-024	SPACER	CONNECTOR BOARD	1		
97	VYTA510-001	DIN CAP		1		
98	VMP3249-102	PIN CORD ASS'Y		1		



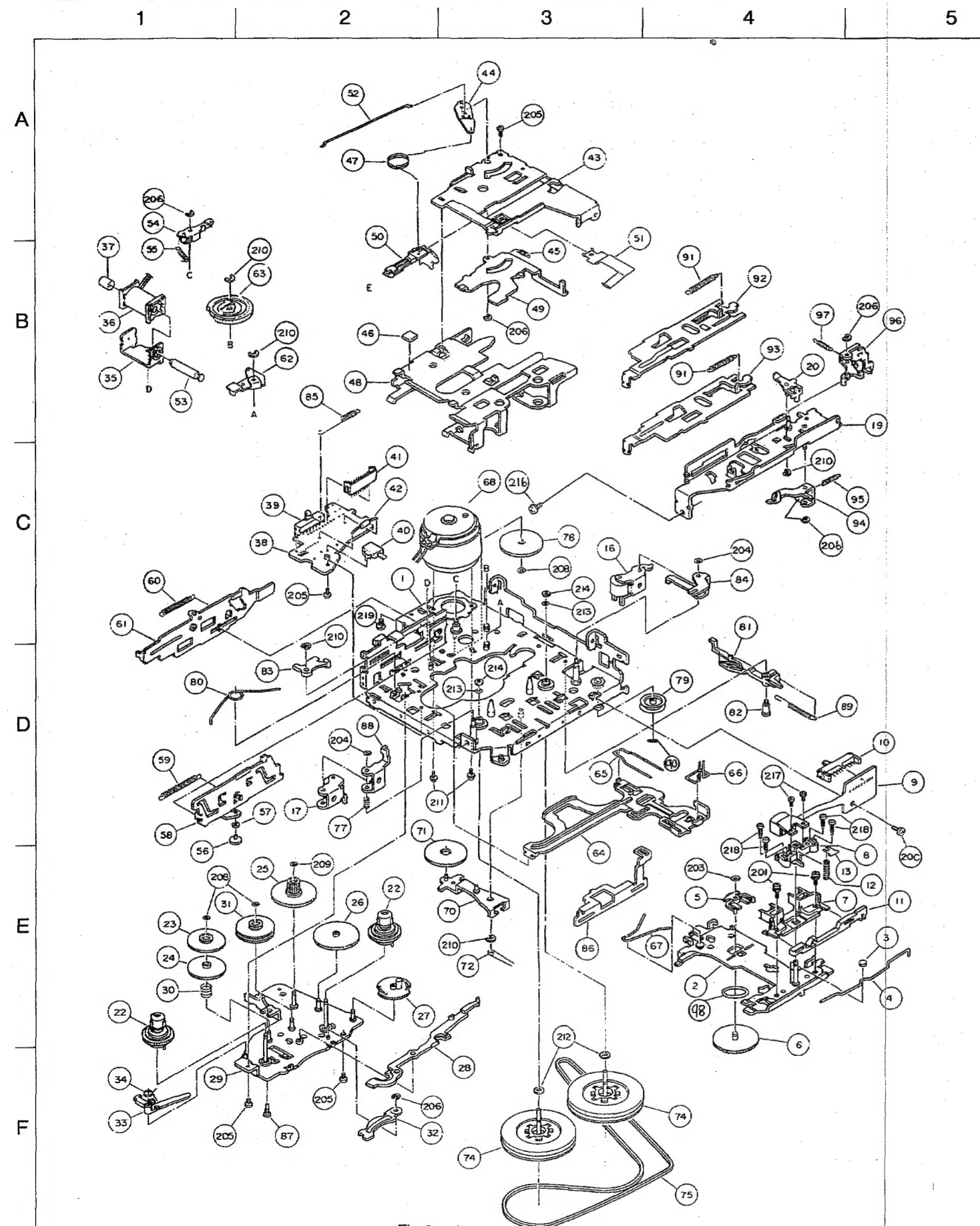
**9 Exploded View of Mechanism Component Parts**

Fig 9 - 1

**● Mechanism Component Parts List**

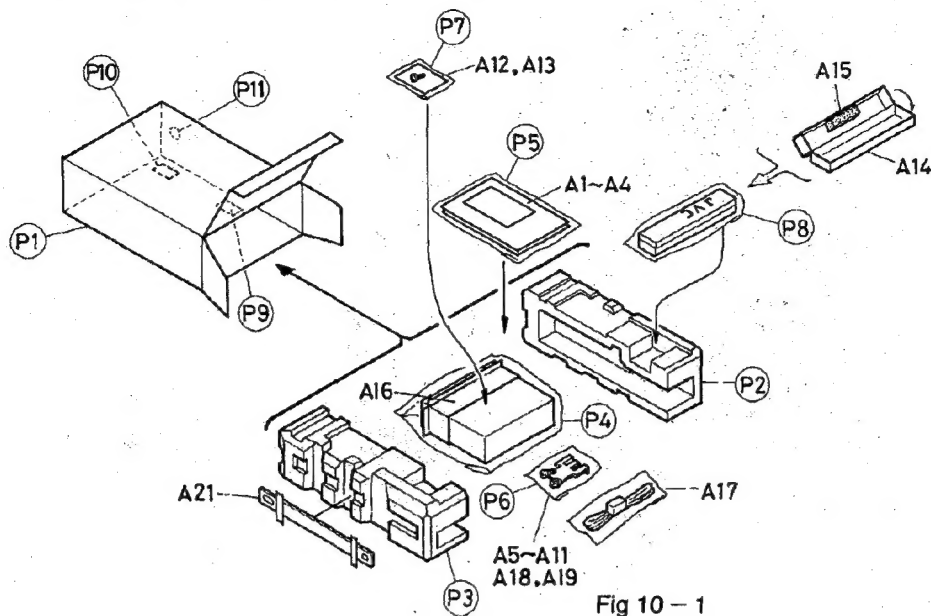
BLOCK NO. M2MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	194001512AT	CHASSIS ASS'Y		1		
2	194016503T	HEAD PANEL ASS'Y		1		
3	19400303T	SP ROLLER		1		
4	19400304T	P.R.SPRING		1		
5	19400305T	P.GEAR METAL		1		
6	19400306T	GEAR		1		
7	19400312T	TAPE GUIDE U		1		
8	19400327T	HEAD HOLDER B		1		
9	62011702T	HEAD	P-7542-BB0571	1		
10	64020207T	SLIDE SWITCH	SSSSA3002A	1		
11	19400328T	SHIFT PLATE B		1		
12	19400315T	H.G SPRING		1		
13	9F2635010T	FASTEN WASHER		1		
16	194004301T	P.ROLL.ARM(F)AS		1		
17	194004302T	P.ROLL.ARM(R)AS		1		
19	194005503T	F.R.BKT(M)ASS'Y		1		
20	194005504T	SEESAW P(M)ASY.		1		
22	194006302T	T.REEL ASS'Y		2		
23	19400612T	P.GEAR (R)		1		
24	19400613T	F.GEAR (R)		1		
25	19400615T	P.D.GEAR		1		
26	19400616T	E.D.GEAR		1		
27	19400617AT	REVERSE GEAR(M)		1		
28	19400648T	E.D.PLATE B		1		
29	194002501T	M.G.P.SEMI-ASY.		1		
30	19400635T	TN SPRING		1		
31	194006312T	P.CLUTCH ASS'Y		1		
32	194014129T	LIFT UP PLATE		1		
33	19401464T	ANTI-REV ARM		1		
34	19401460T	TRI ARM SPRING		1		
35	19401431T	P.BRACKET(K)		1		
36	19401432T	K.F COIL ASS'Y		1		
37	19401433T	CORE(K)		1		
38	19400704T	SW SUBSTRATE		1		
39	64020206T	SLIDE SWITCH	SSSSA2001A	1		
40	64020405T	PUSH SWITCH	SPVC11001A	1		
41	68140248T	CONNECTOR	53253-1020	1		
42	ERB12-01	DIODE	ERB12-01	1		
43	19400801T	CASE LIFTER		1		
44	184008503T	P.E PLATE ASS'Y		1		
45	18400820T	SPRING		1		
46	18400875T	CUSHION RUBBER		1		
47	18400813GT	REVERSE SP.C		1		
48	19401410T	CASSETTE CASE M		1		
49	19400804T	C.D PLATE B		1		
50	19400810T	PACK SLIDER		1		
51	19400806T	PACK PRESS.SP.		1		
52	18400823T	P.E SPRING		1		
53	19401434T	PLUNGER(K)		1		
54	194020505T	T.A.PLATE ASS'Y		1		
55	19401437T	T.A.PLATE SP.		1		
56	19400901T	H.P.ROLLER(A)		1		
57	19400902T	H.P.ROLLER(B)		1		
58	19400953T	C.H.PUSH PLAT.M		1		

BLOCK NO. M2MM 111

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
59	19400905T	C.H.SPRING		1		
60	19400906T	PUSH LEVER SP.		1		
61	19400907T	PUSH LEVER M		1		
62	194020502AT	K.F PLATE ASS'Y		1		
63	194014739T	K.F CAM GEAR		1		
64	19401001T	MAIN PLATE		1		
65	19401002T	M.S.SPRING		1		
66	19401007T	H.S.SPRING		1		
67	19401444T	K.F.SPRING		1		
68	194011310T	MOTOR ASS'Y	MCI-5U3LCKA	1		
70	194012504T	FR PLATE ASS'Y		1		
71	19401703T	F.GEAR		1		
72	19401704T	FR SPRING M		1		
74	194013303T	F.L.CAPS.ASS'Y		2		
75	19401417T	MAIN BELT		1		
77	18400437T	P.P SPRING		1		
78	194014123T	MAIN GEAR M		1		
79	194014115T	MIDDLE PULLEY		1		
80	19401443T	HEAD PANEL SP.M		1		
81	19401405T	TRIGGER ARM(C)		1		
82	19401406T	COLLAR SCREW(T)		1		
83	19401442T	H.P.PUSH ARM(K)		1		
84	19401409T	SEESAW WRK.PLT.		1		
85	19401412T	POWER SW.SPRING		1		
86	194014127T	FR SLIDE PLT.M		1		
87	19401415T	COLLAR SCREW(P)		1		
88	19401416T	H.P.RETURN ARM		1		
89	19401407T	T.A.SPING(C)		1		
90	9W0225010T	P.WASHER CUT	0.85X2.8X0.25	1		
91	19401589T	FR LEVER SPRING		2		
92	19401590T	PUSH LEVER		1		
93	19401591T	PUSH LEVER		1		
94	19401503T	P.C.PLATE		1		
95	19401504T	P.C.SPRING		1		
96	19401505T	ROCK PLATE (M)		1		
97	19401506T	ROCK PLATE SP.M		1		
98	9W0540020T	HL WASHER	10 X 14 X 0.4	1		
200	9P1220051T	S TAPPING SCREW	M2 X 5	1		
201	9P0220051T	TAMS SCREW	M2 X 5	2		
203	9W0640070T	HL WASHER CUT	2.1 X 4 X 0.4	1		
204	9W0630060T	HL WASHER CUT	1.6 X 3.8 X 0.3	2		
205	9C0420303T	S TAPPING SCREW	FOR CAMERA M2X3	4		
206	9E0100152T	E RING	S 1.5	5		
208	9W0625030T	HL WASHER CUT	1.2X3X0.25	3		
209	9W0630050T	HL WASHER CUT	1.6 X 3.4 X 0.3	1		
210	9E0100202T	E RING	S2.0	3		
211	9P0220031T	TAMS SCREW	M2 X 3	2		
212	9W0513060T	HL WASHER	2.1 X 5 X 0.13	2		
213	9W0520010T	HL WASHER CUT	1.85 X 3.2 X 0.	2		
214	9W0650030T	HL WASHER CUT	1.5 X 3.2 X 0.5	2		
216	9P0226041T	TAMS SCREW	M2.6 X 4	1		
217	9F2720401T	SCREW	FOR HEAD	2		
218	9F2220071T	ADJUST SCREW		4		
219	9P0226531T	SCREW	M2.6 X 3.5	1		

# 10 Packing Illustration and Parts List



## ● packing Parts List

		BLOCK NO. <b>M3MN</b>					
Δ	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	1	VNN3430-211	INSTRUCTIONS		1		
		VNN3430-451	INSTRUCTIONS		1	E	
		VNN3030-481	INSTRUCTIONS		1	E	
		VNN3430-471	INSTRUCTIONS		1	GI	
A	2	VNC2400-066	CAUTION SHEET		1		
A	3	BT-20066A	WARRANTY CARD		1	B	
		BT-20060A	WARRANTY CARD		1	B	
		BT-20135	WARRANTY CARD		1	G	
A	4	VND3050-001	IDENTITY CARD		1		
A	5	VKZ4027-002	PLUG NUT		1		
A	6	VKH4871-001	MOUNT BOLT		1		
A	7	VKZ4328-001	LOCK NUT	FOR M5	1		
A	8	WNS5000Z	WASHER		1		
A	9	VKY3126-002	SIDE SPRING	FOR SIDE SPRING	2		
A	10	SSSP3006Z	SCREW		2		
A	11	VKL7233-001	HOOK		1		
A	12	SPSJ1725M	SCREW		1		
A	13	VND4619-001	SHEET		1		
A	14	VJB2014-001	HARD CASE		1		
A	15	VYSH118-002	SPACER		1		
A	16	VKL3732-015	MOUNTING SLEEVE		1		
A	17	VMC0014-081A	11P CORD ASS'Y		1		
A	18	VKL7649-001	CORD HOLDER	FOR CORD HOLDER	1		
A	19	QHX5080-001	WIRE CLAMP		1		
A	21	VKL5460-001	STAY		1		
KIT	1	KSRT70K-SCREW1	SCREW KIT 1	P6, A5-A11, A18-A	1		
KIT	2	KSRT30K-SCREW2	SCREW KIT 2	P7, A12-A13	1		
P	1	VPC3430-001	CARTON	PRINTED IN SING.	1		
P	2	VPH1627-001	CUSHION(L)		1		
P	3	VPH1628-001	CUSHION(R)		1		
P	4	VPE3005-066	POLY BAG	FOR SET	1		
P	5	QPG8017-02404	POLY BAG	INST. BOOK	1		
P	6	QPGA008-01205	POLY BAG	SKREW KIT 1	1		
P	7	QPGA008-01205	POLY BAG	SKREW KIT 2	1		
P	8	QPGA010-03003	POLY BAG	FOR HARD CASE	1		
P	9	VND3046-005	SERIAL TICKET	CARTON	1	G	
		VND3046-001	SERIAL TICKET		1	GE, GI	
		VND3046-003	SERIAL TICKET		1	E	
		VND3046-004	SERIAL TICKET		1	B	
P	10	VND3071-060	EAN CODE LABEL		1		
P	11	QZLA001-005	GREEN POINT LAB		1	G	

# JVC

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